



# **BOATBUILDING GUIDE**

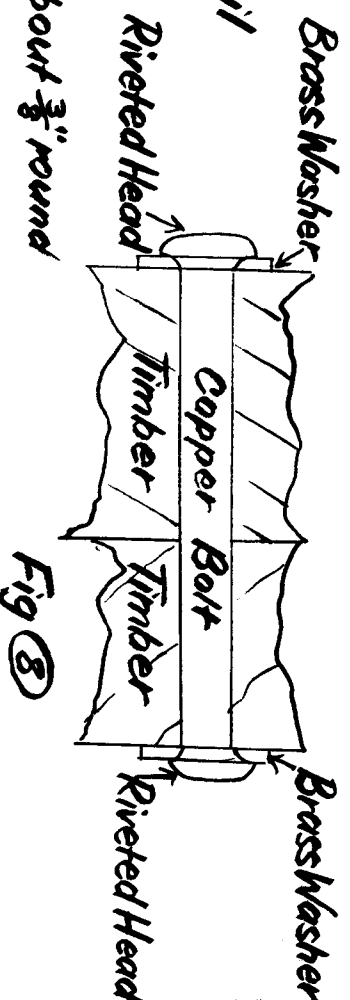
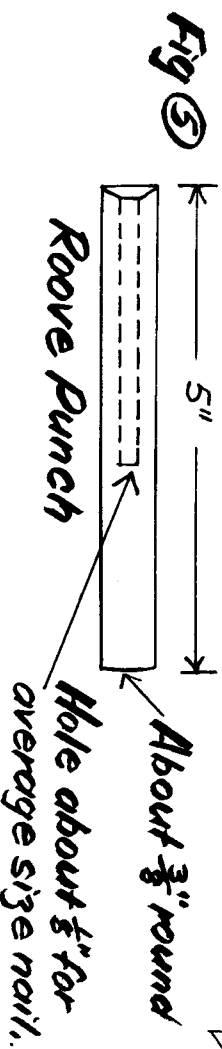
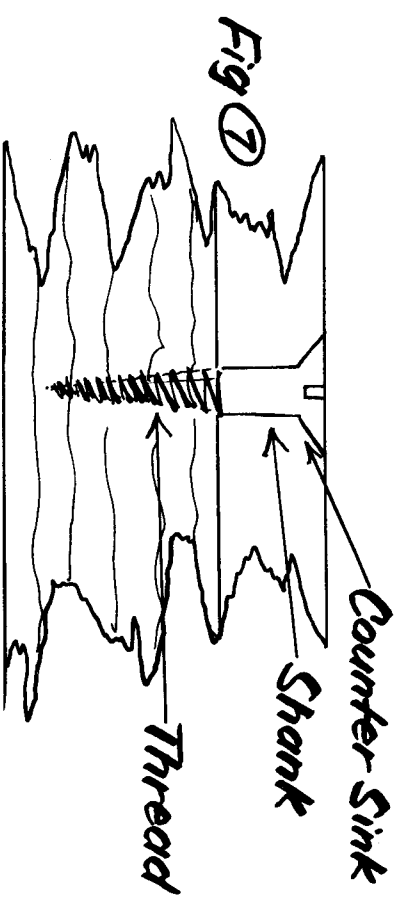
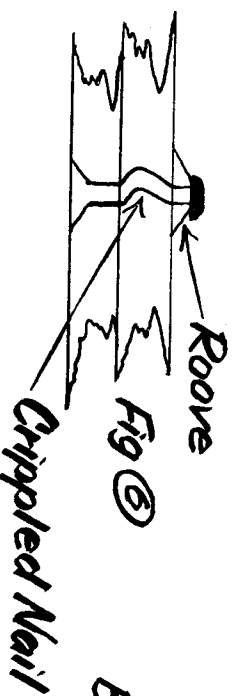
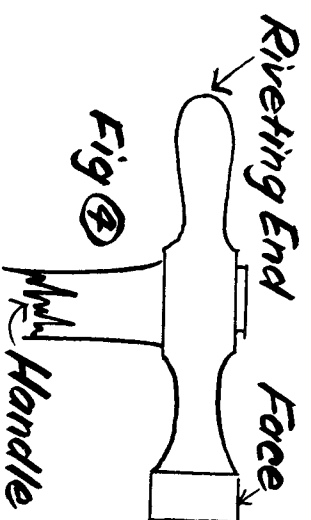
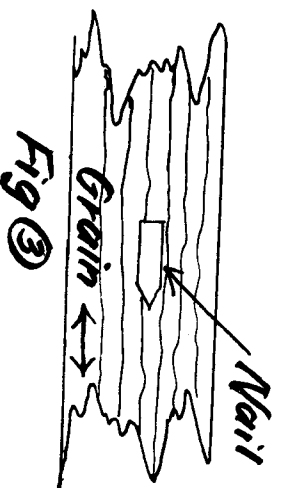
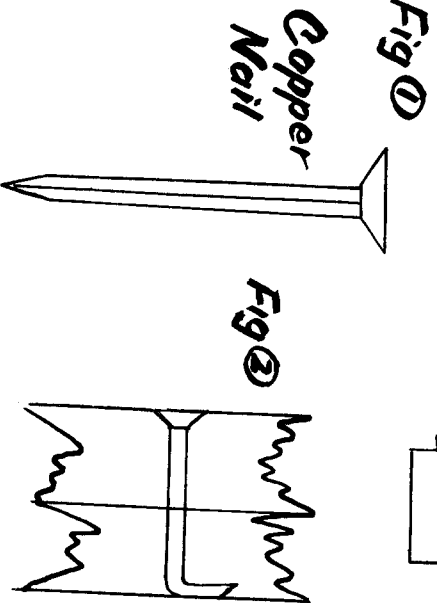
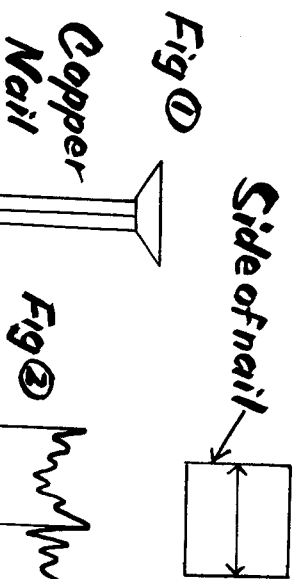
Notes for use by trainees attending the Boatbuilding Course being held under the auspices of the South Pacific Commission and the Bureau of Technical Assistance Operations of the United Nations, at Auki, Malaita Island, British Solomon Islands Protectorate.

1960-1962

*ARTHUR N. SWINFELD, A.M.I.N.A.*

**Vol. II: DIAGRAMS**

SPC  
623  
SW



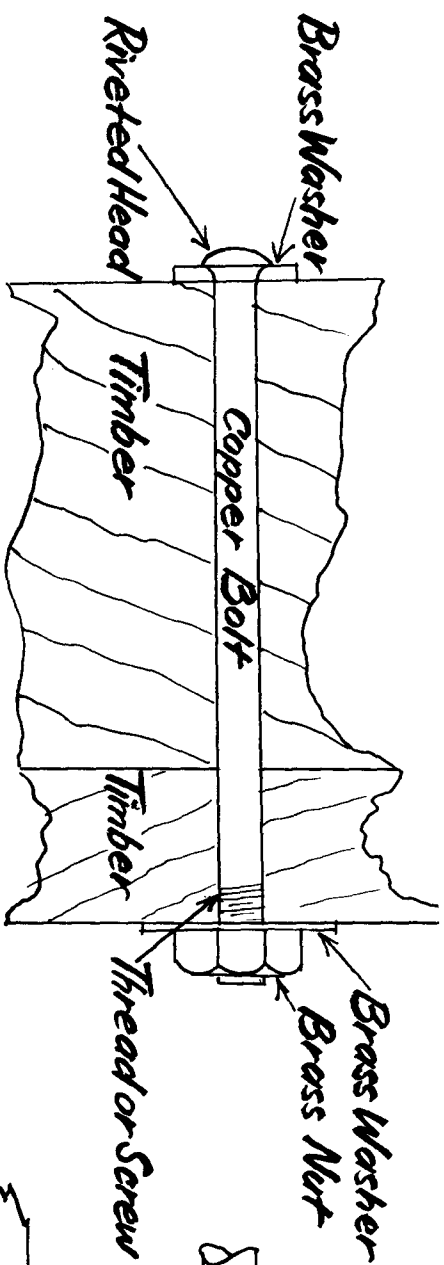


Fig 9

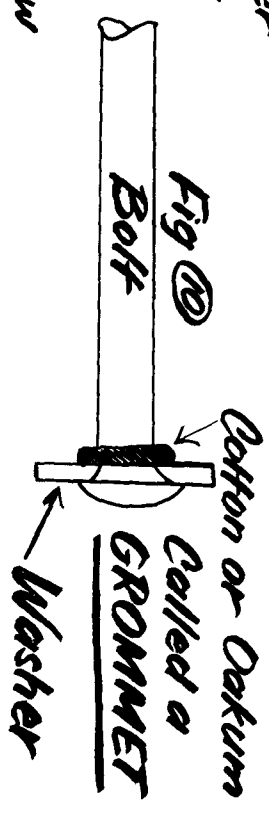


Fig 10

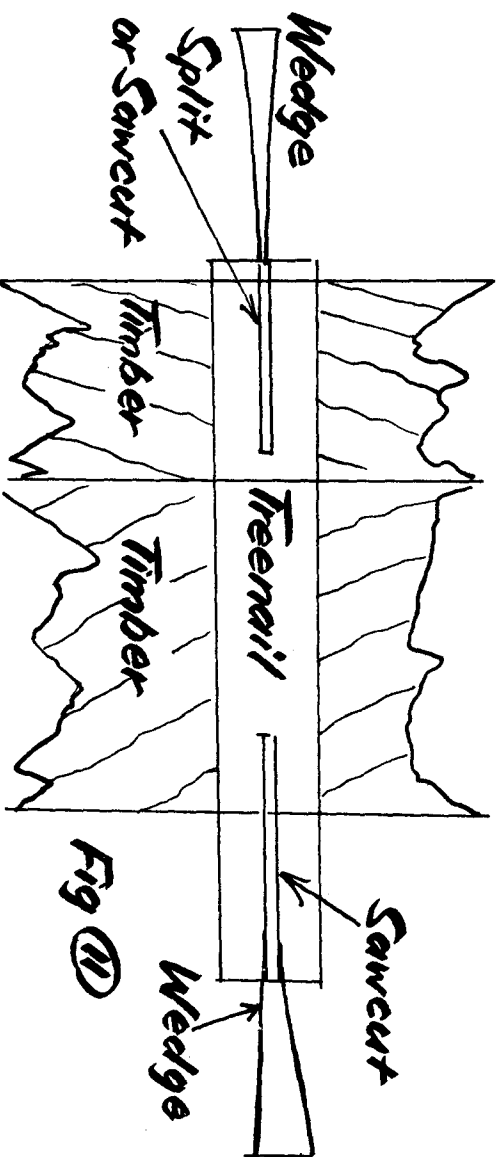


Fig 11

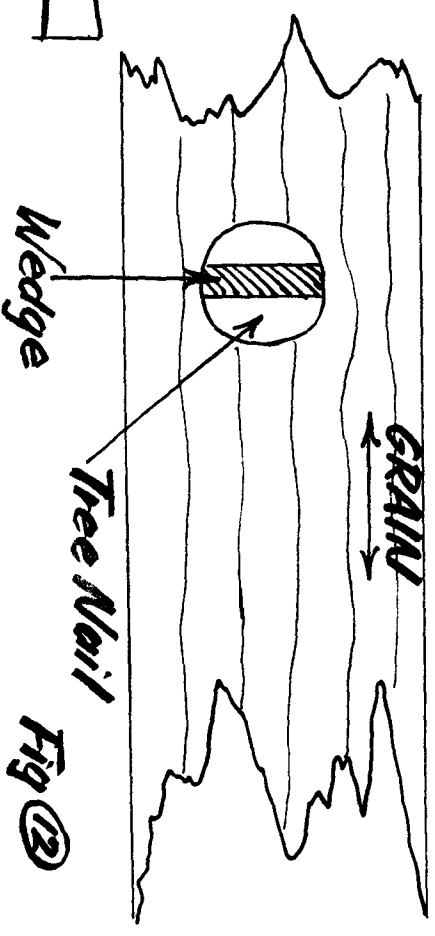


Fig 13

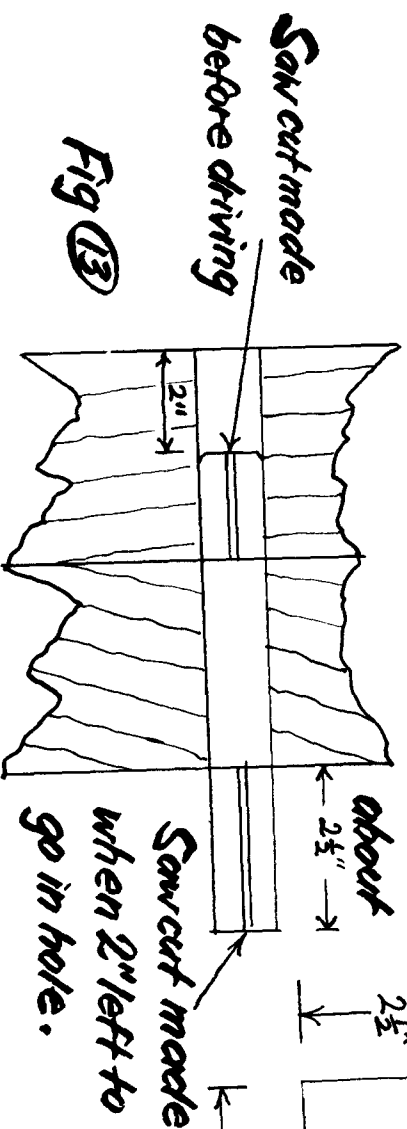


Fig 13

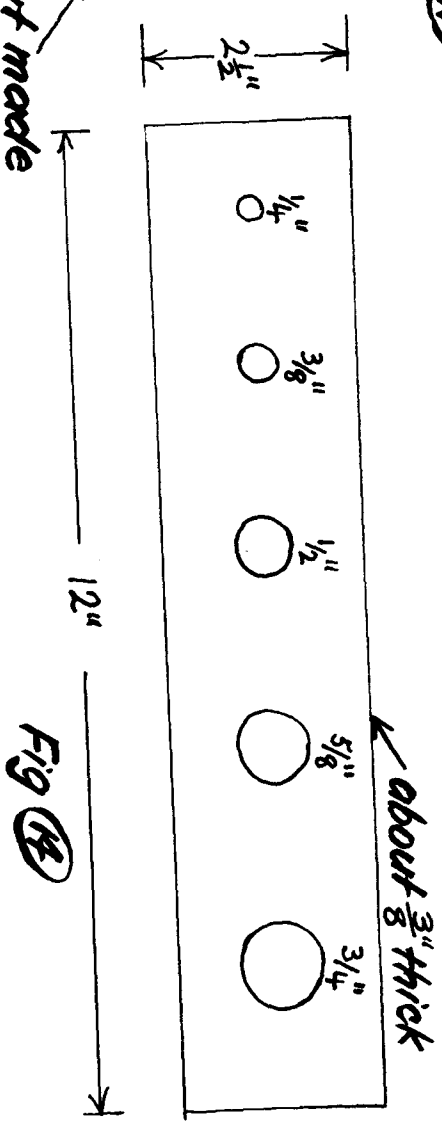


Fig 14

**Old File**

← Tang bent over and sharpened

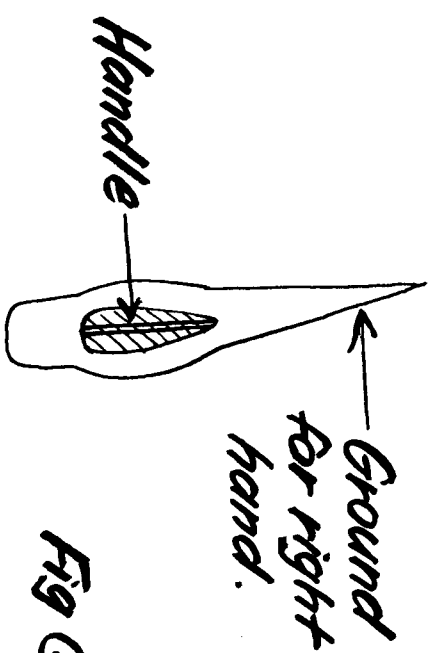
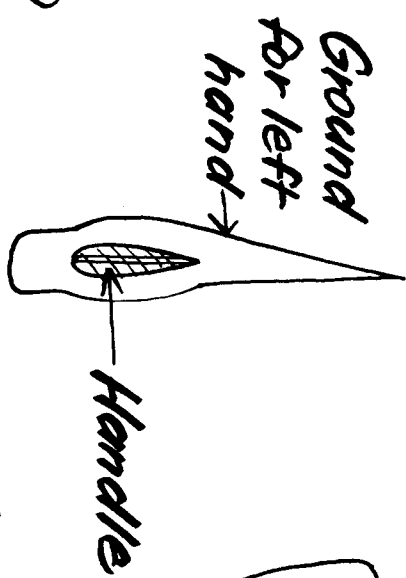


Fig (15)



Handle

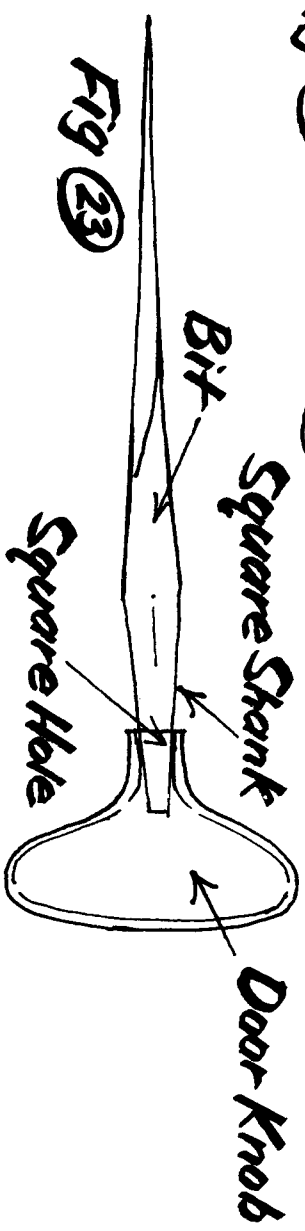


Fig (23)

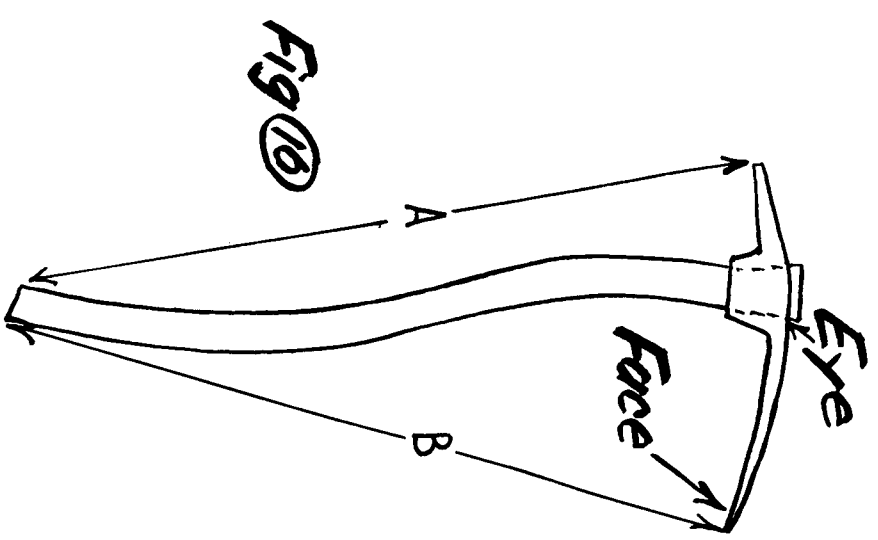


Fig (16)

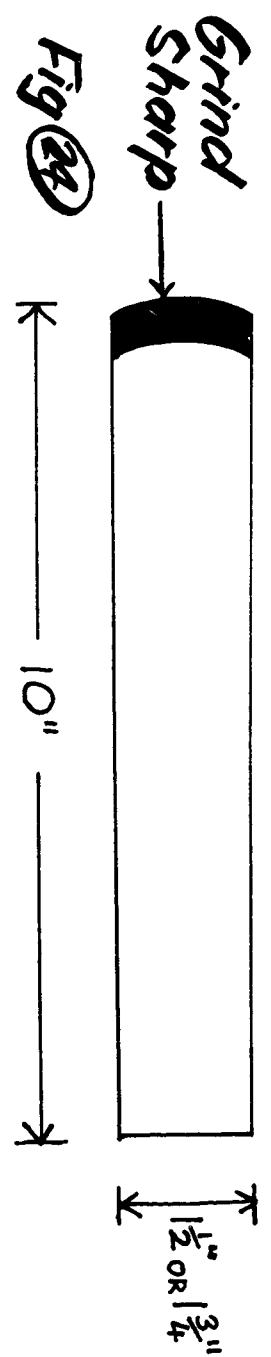
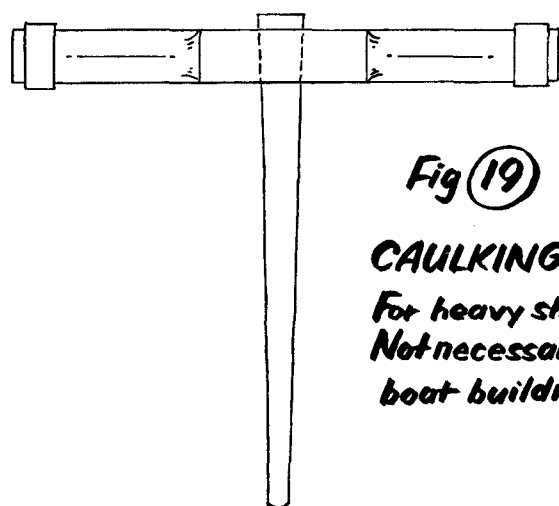
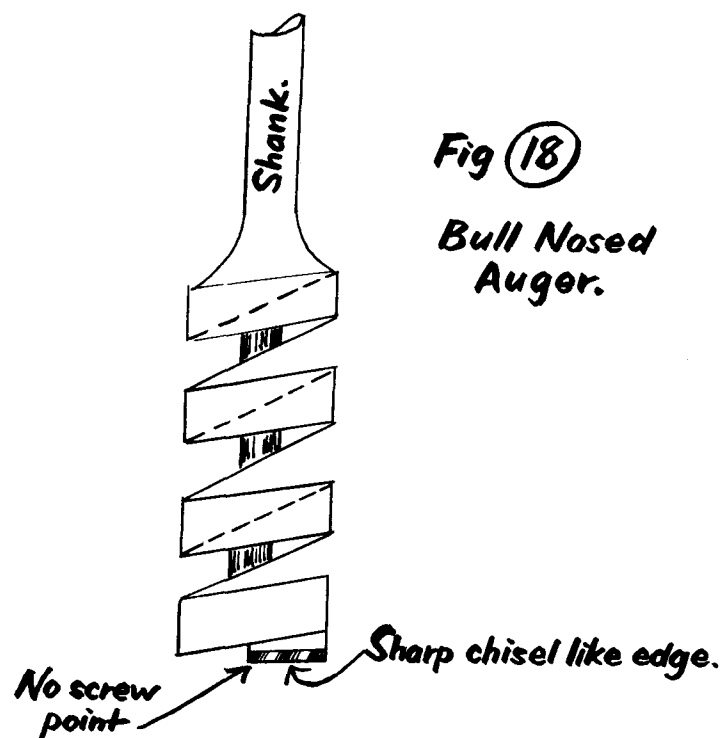
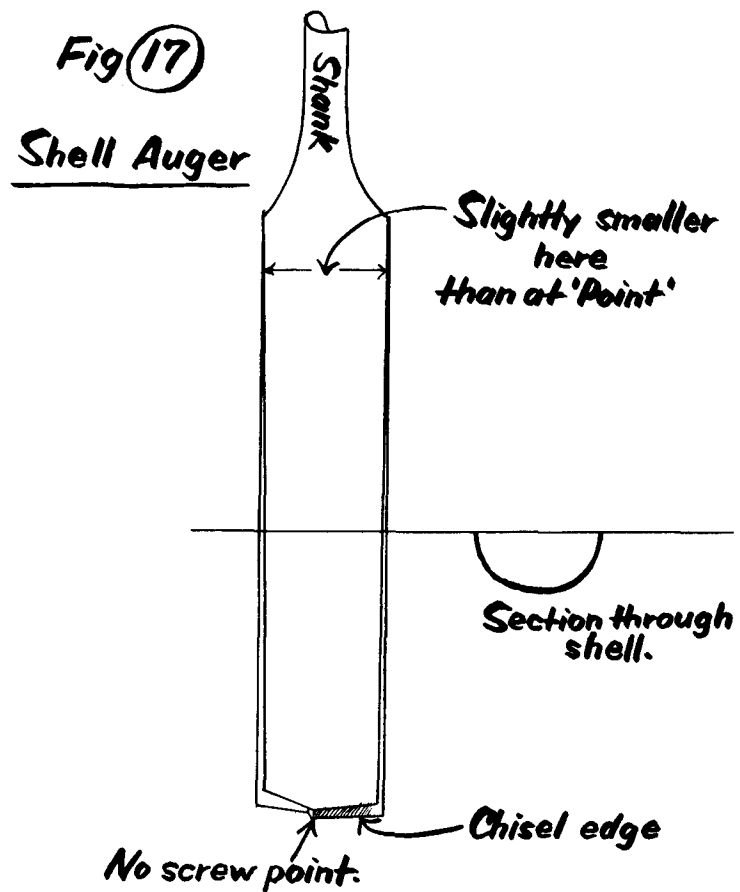
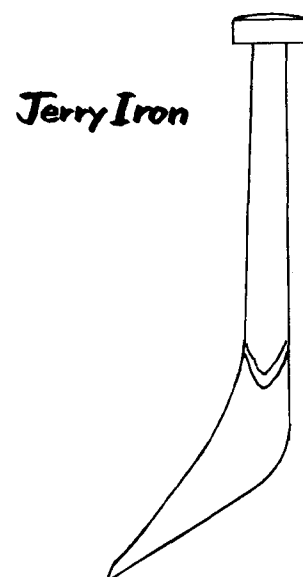


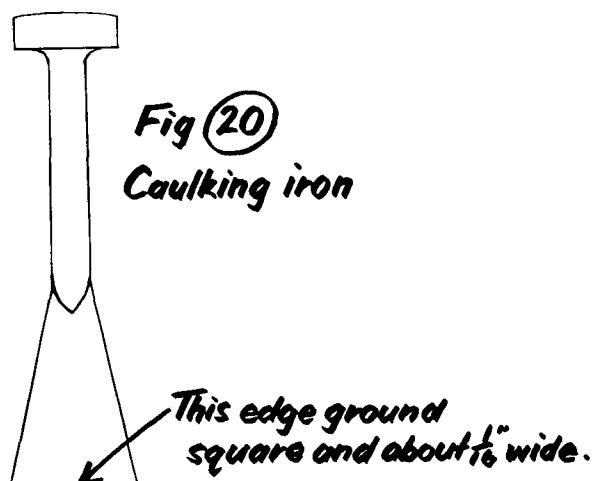
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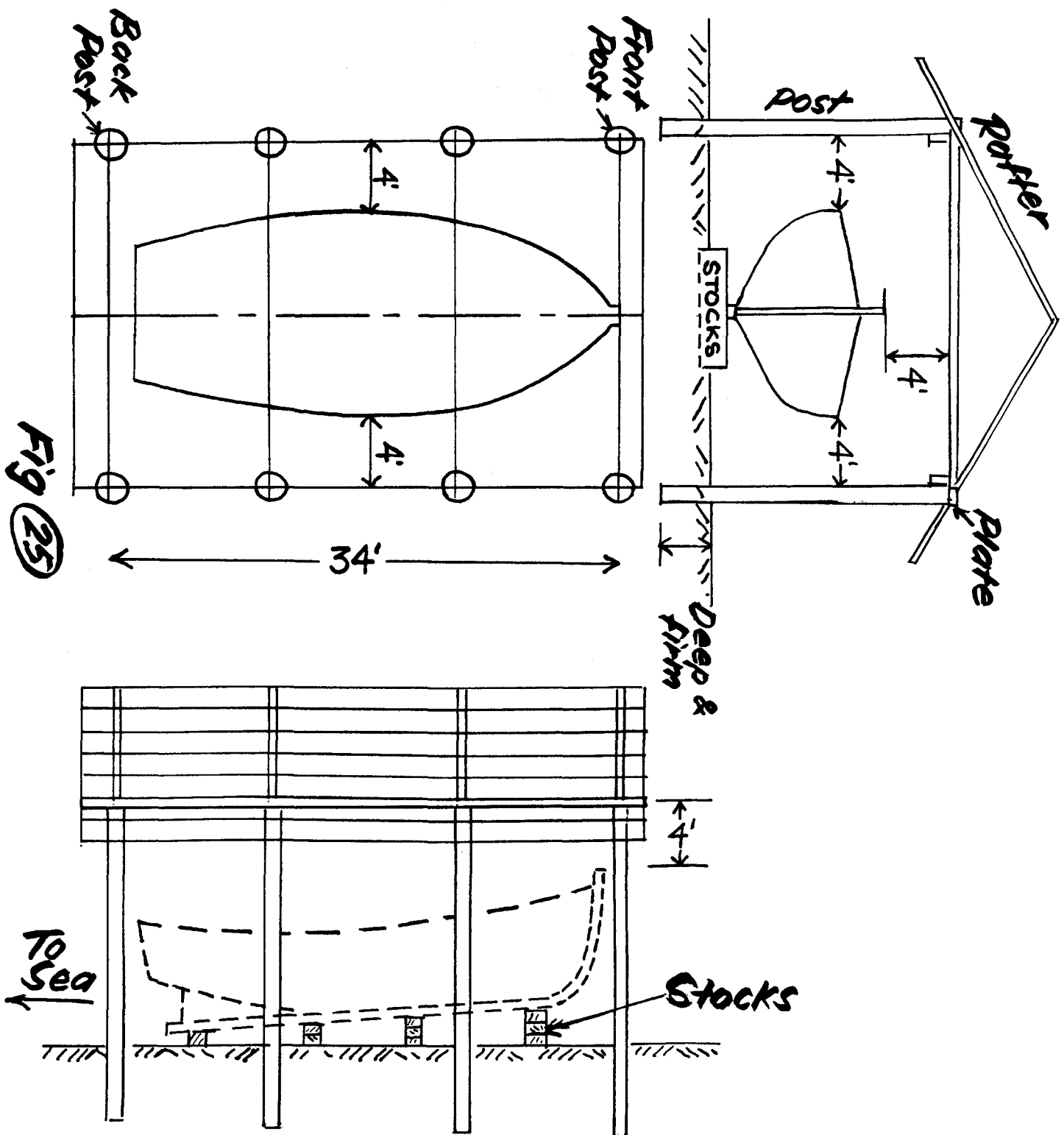


**Fig (19)**  
**CAULKING Mallet**  
For heavy shipwork only.  
Not necessary on light  
boat building.



**Fig (21)**





**Fig (25)**

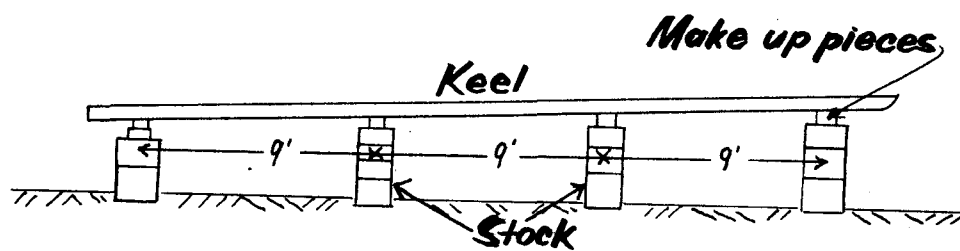


Fig (26)

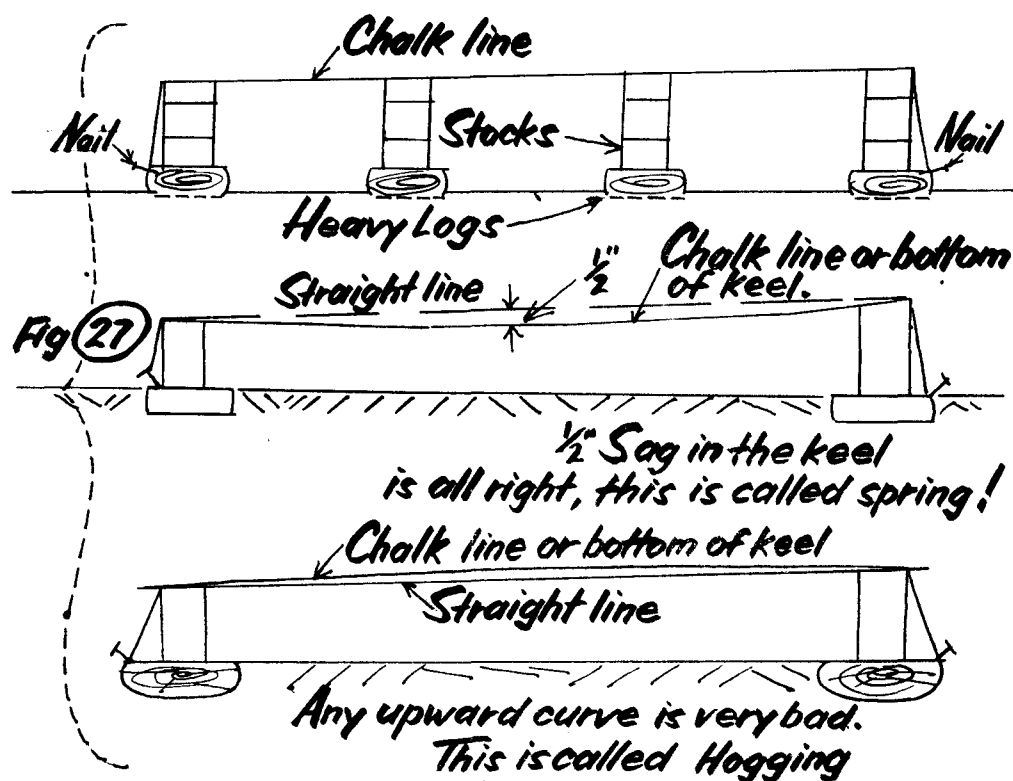
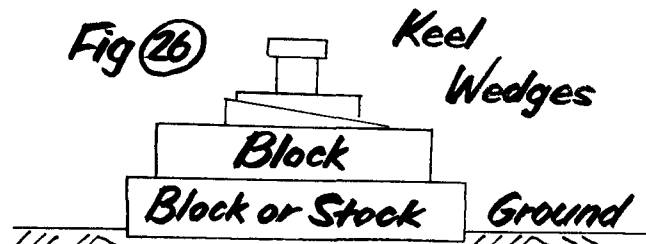


Fig (28)

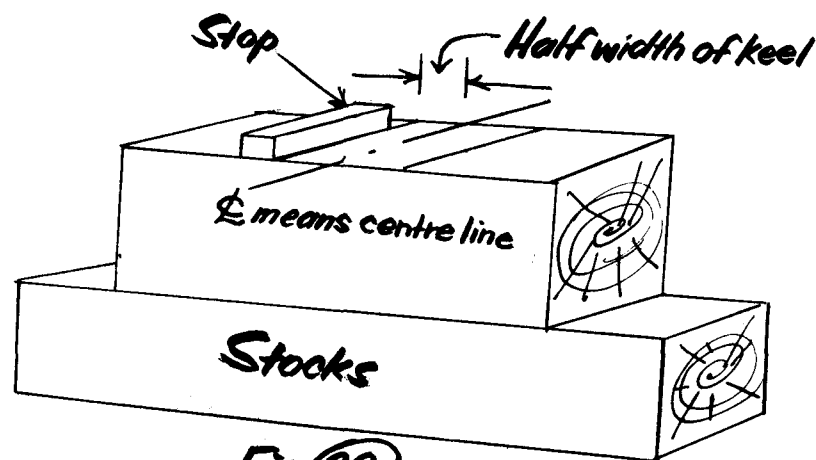
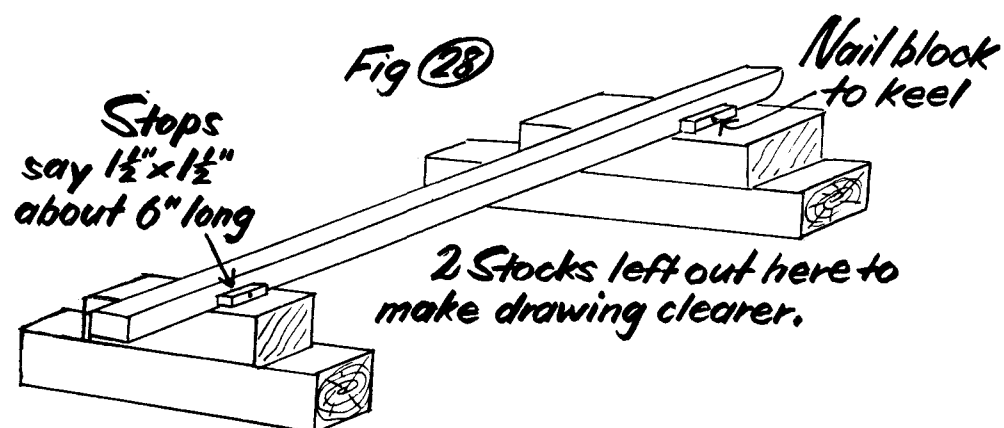
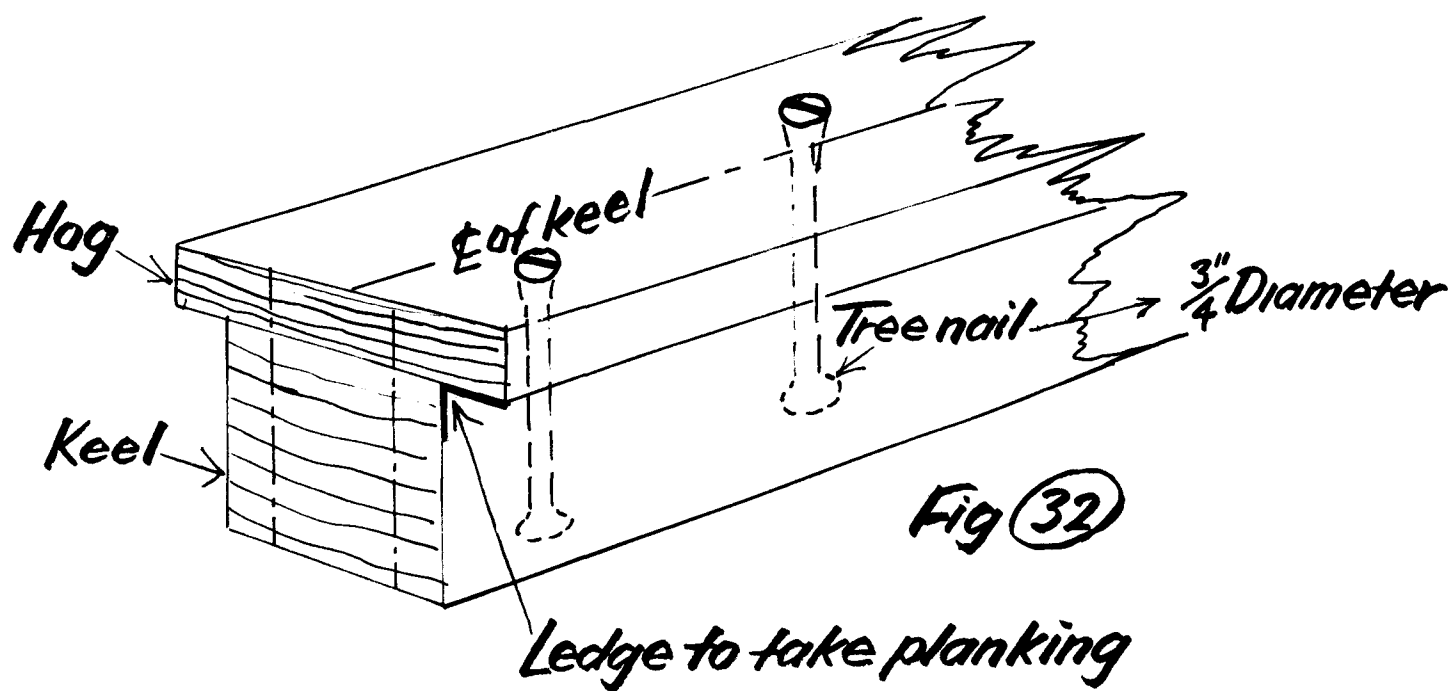
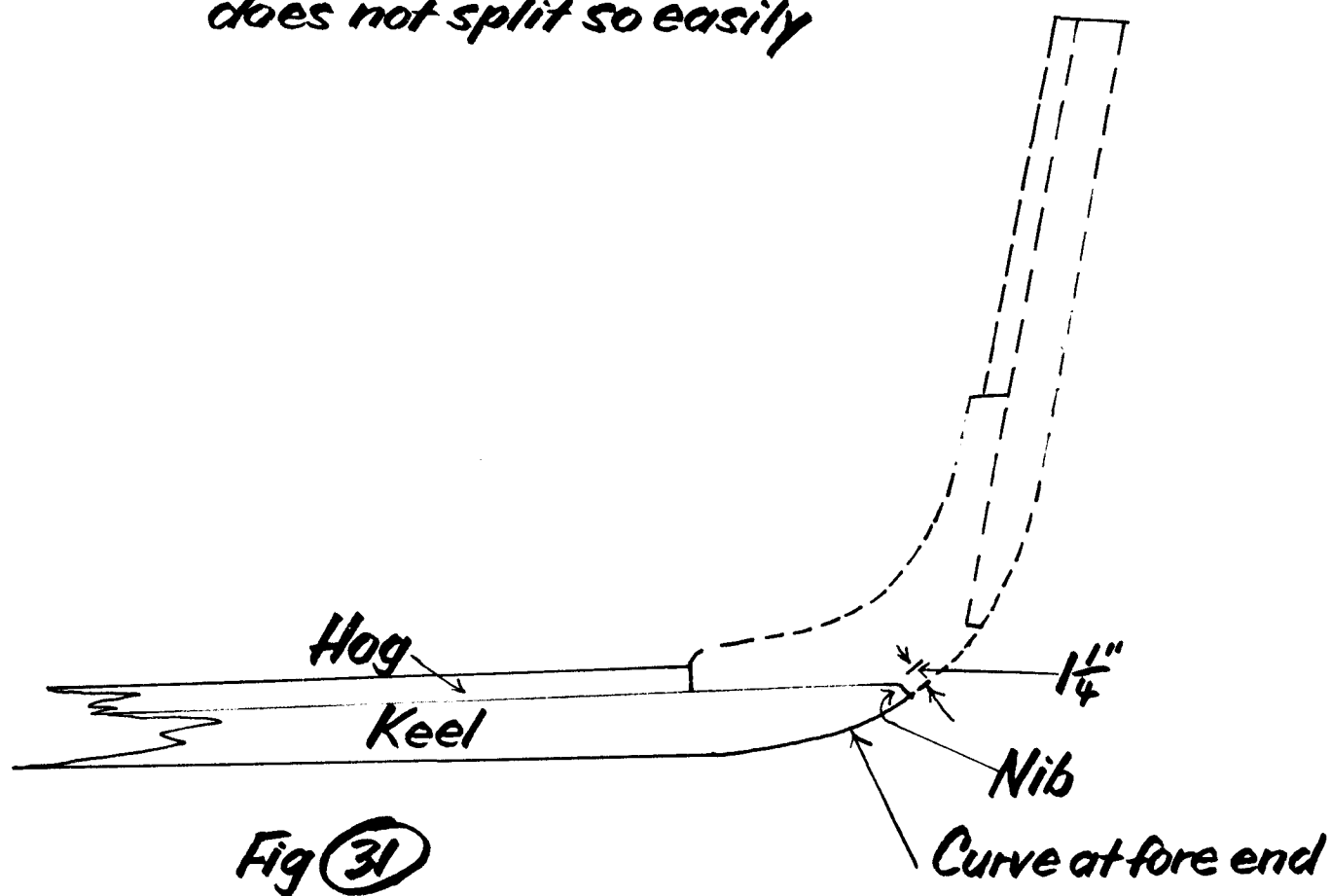
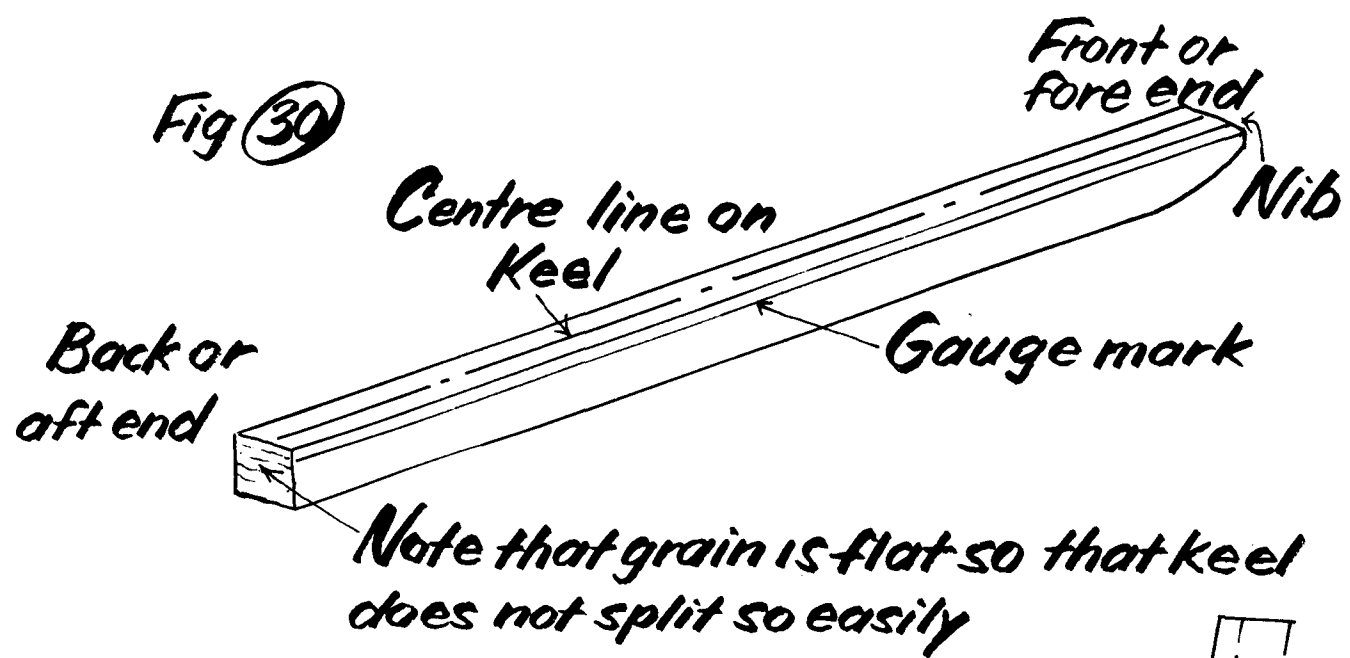
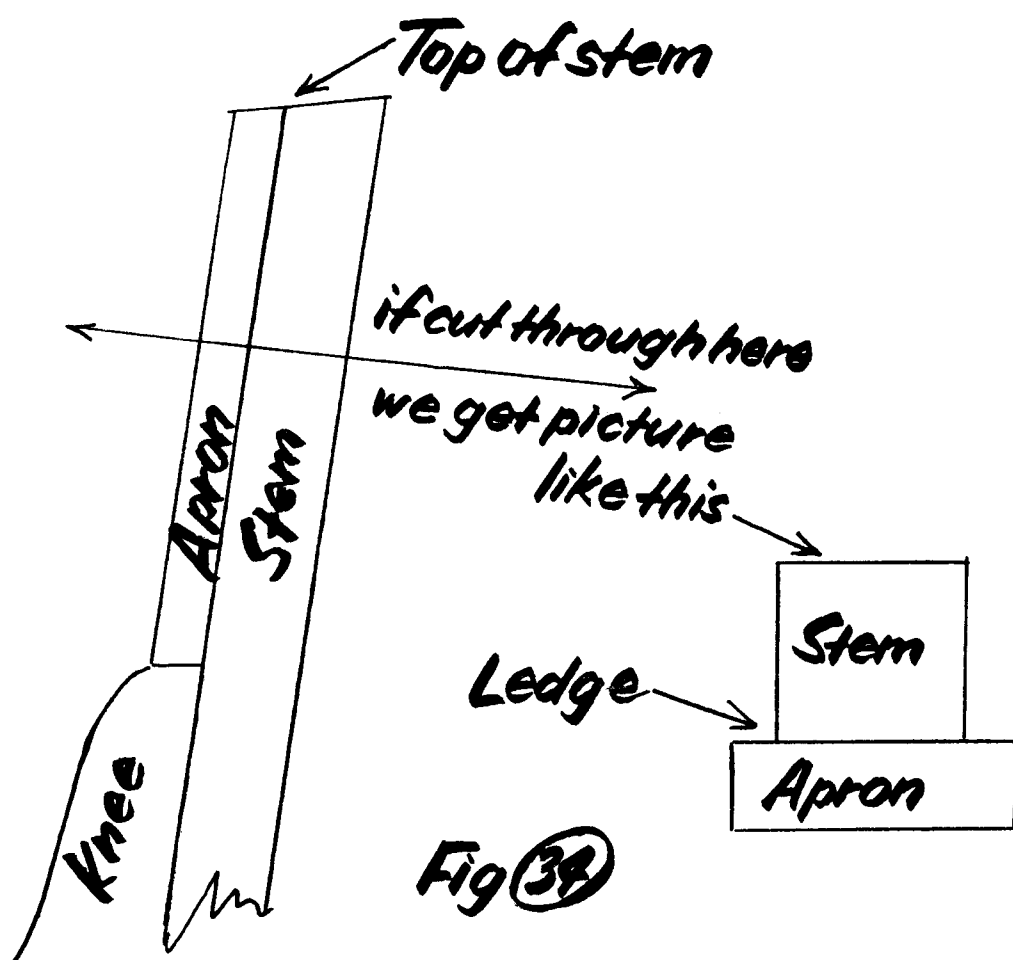
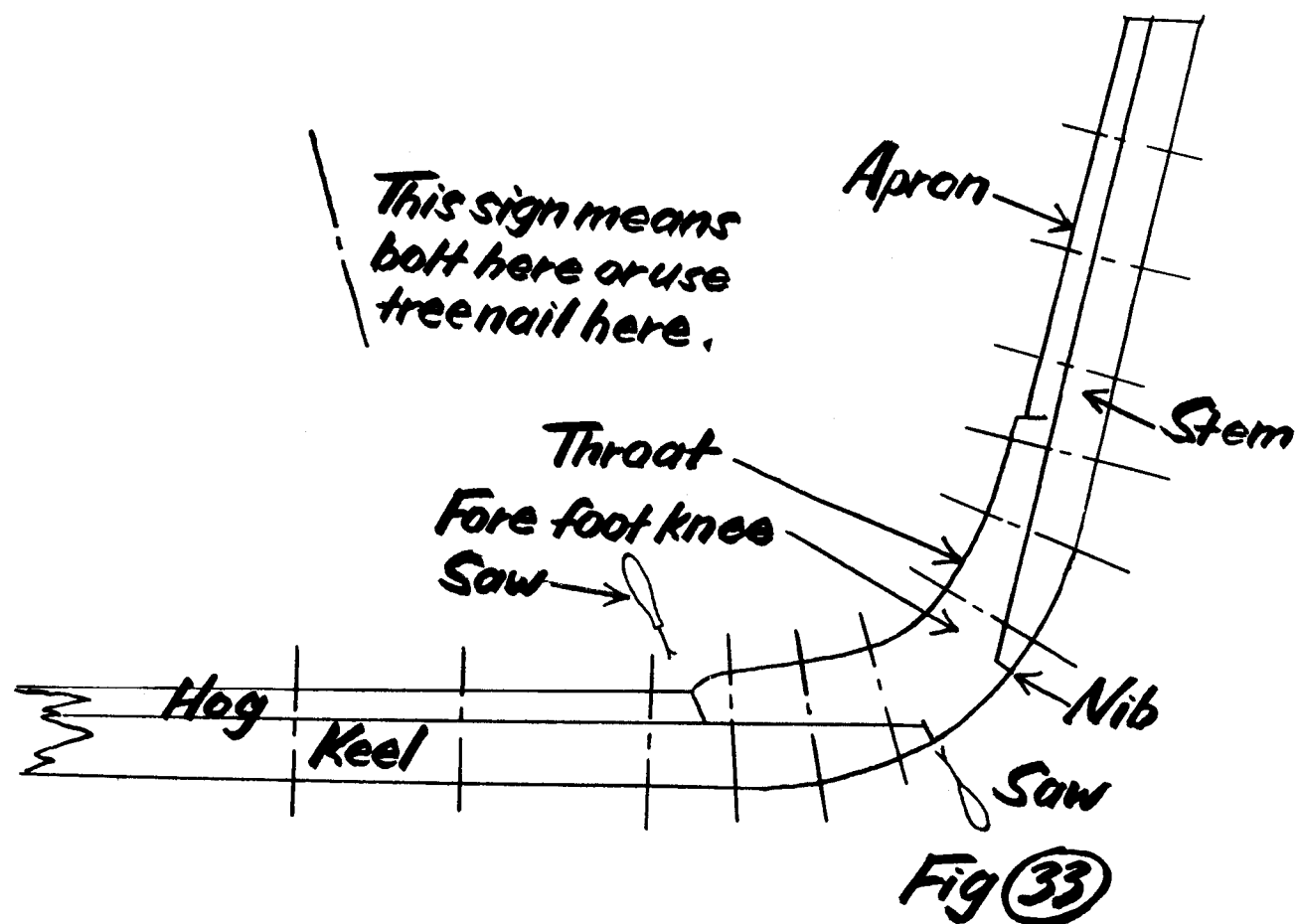
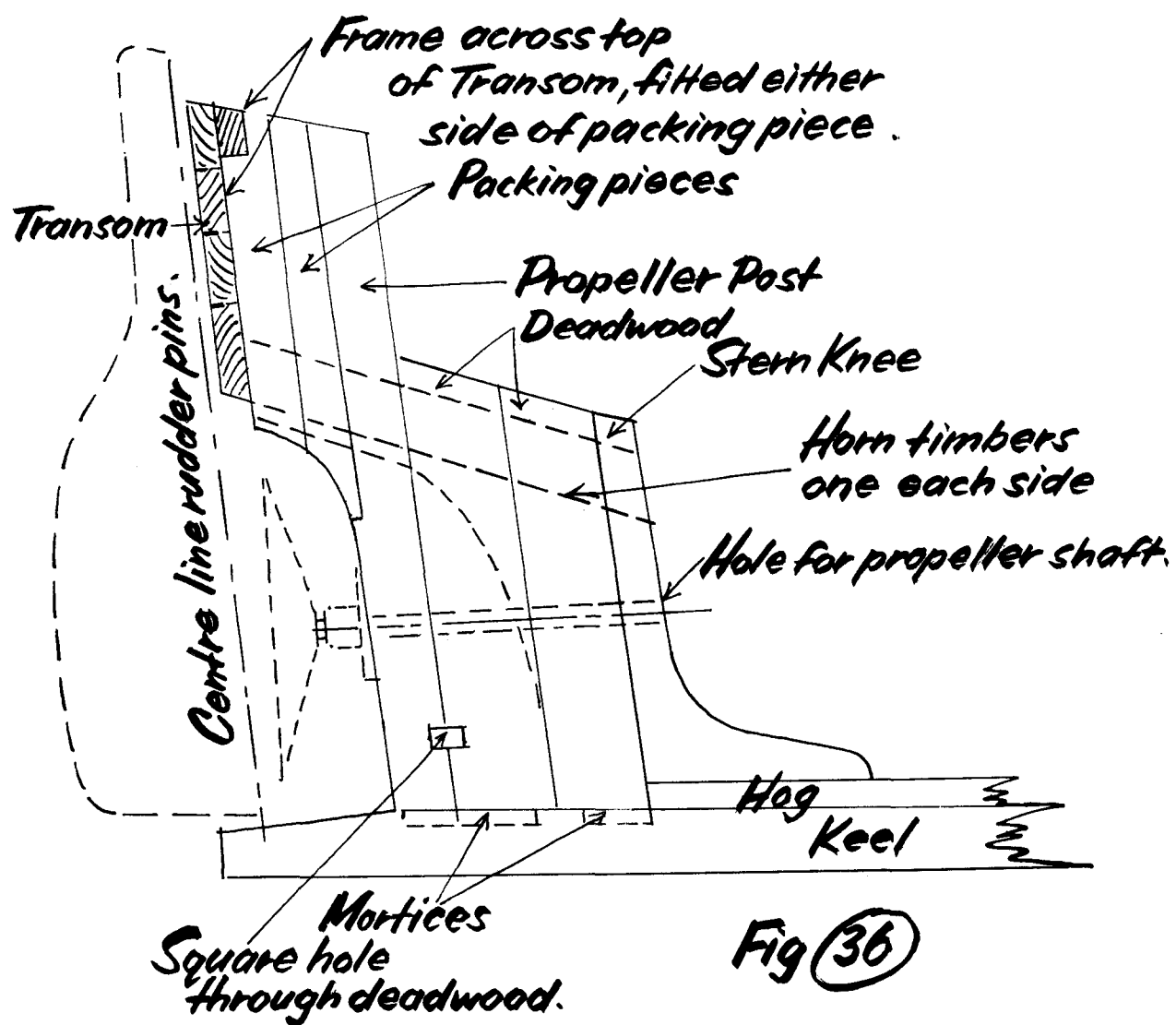
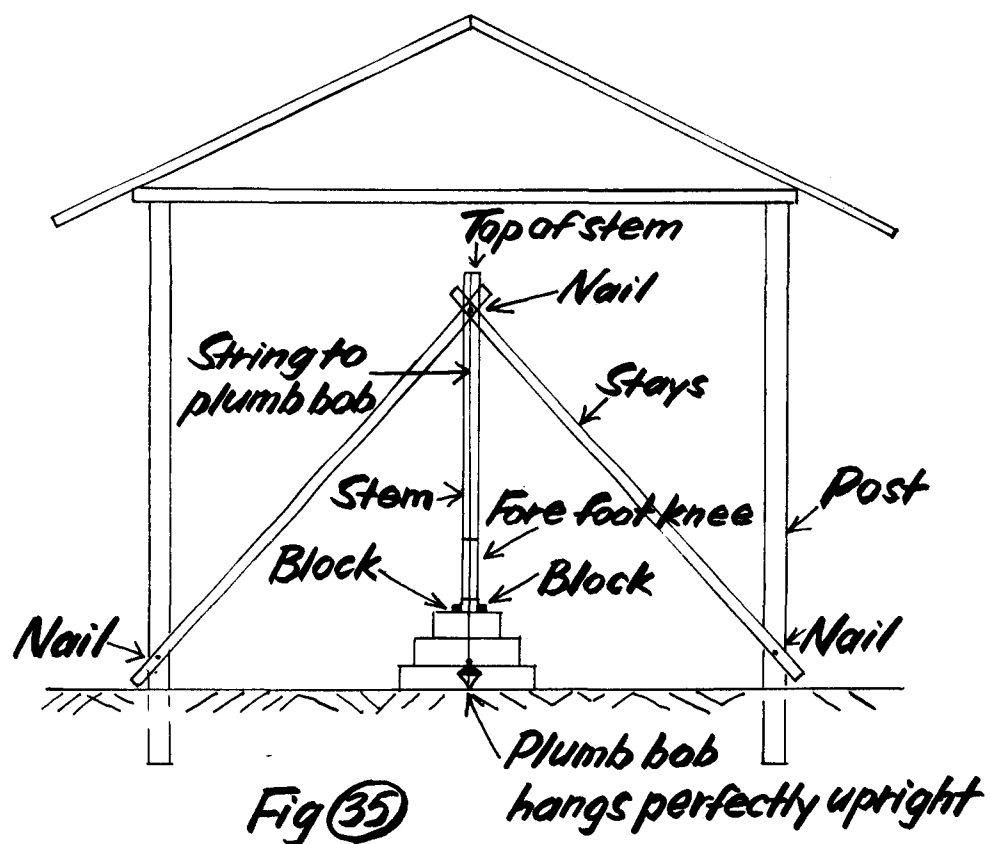


Fig (29)



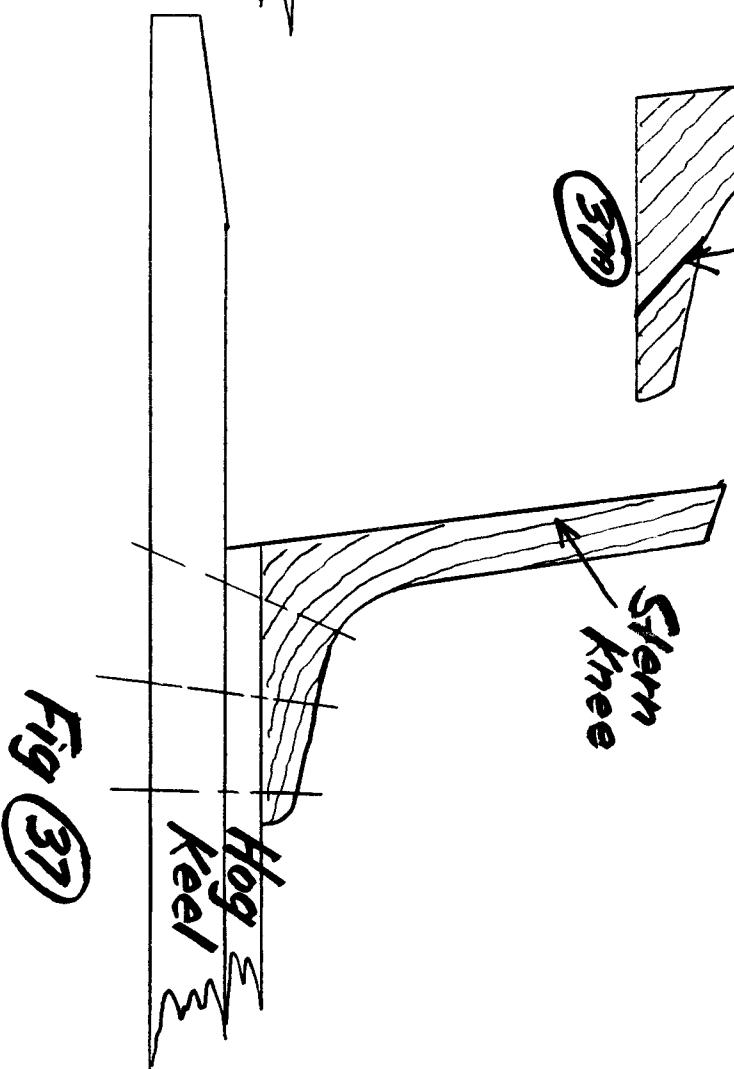
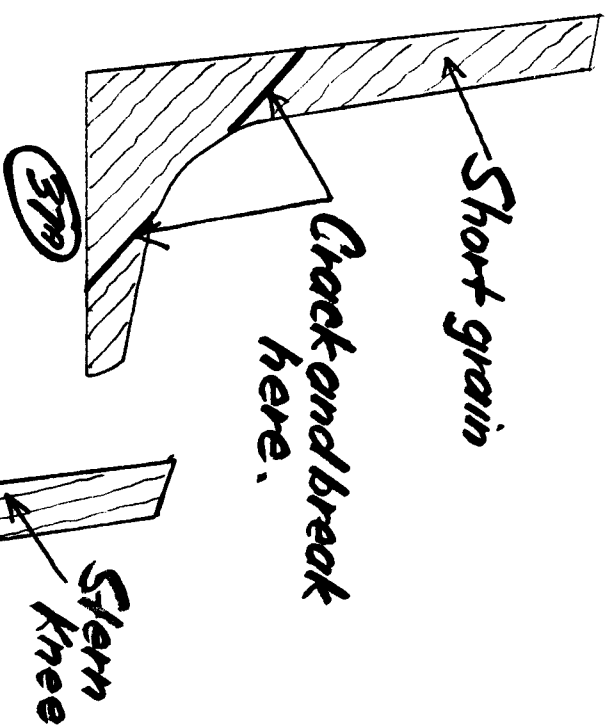
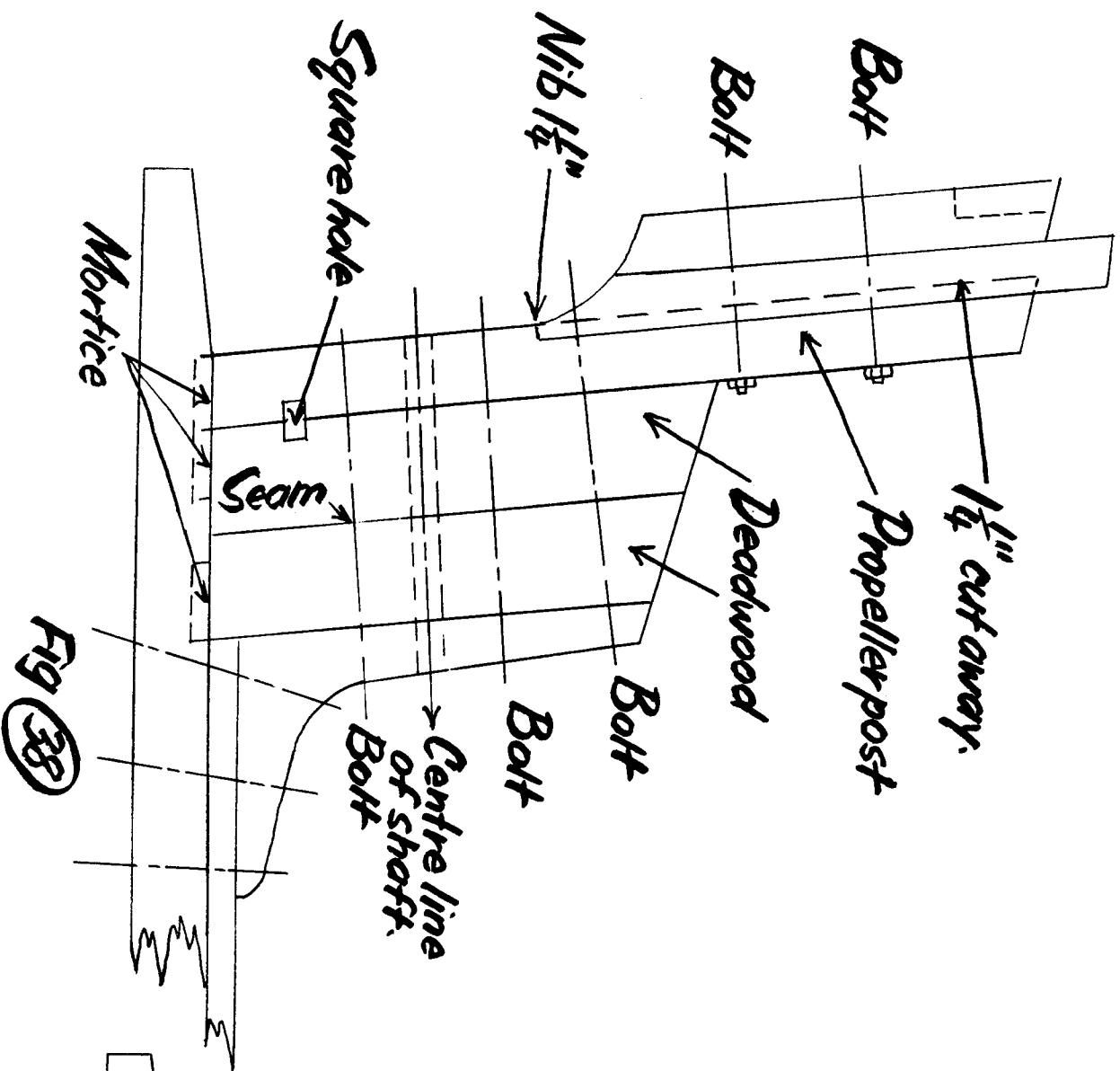






Note

25'-0" Fishing vessel drawings show another method of building this stern frame.



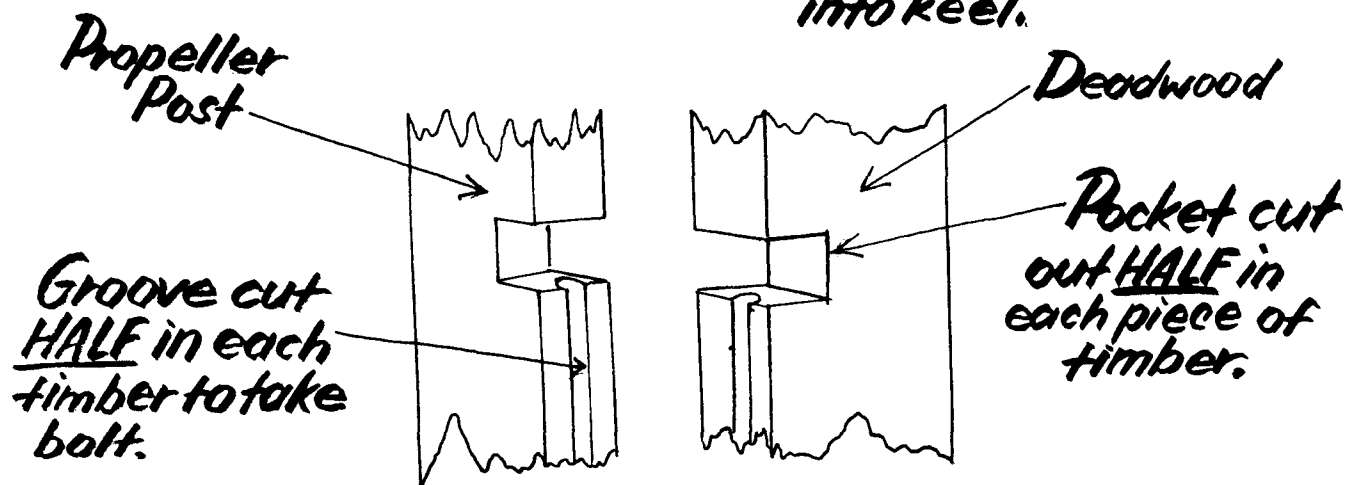
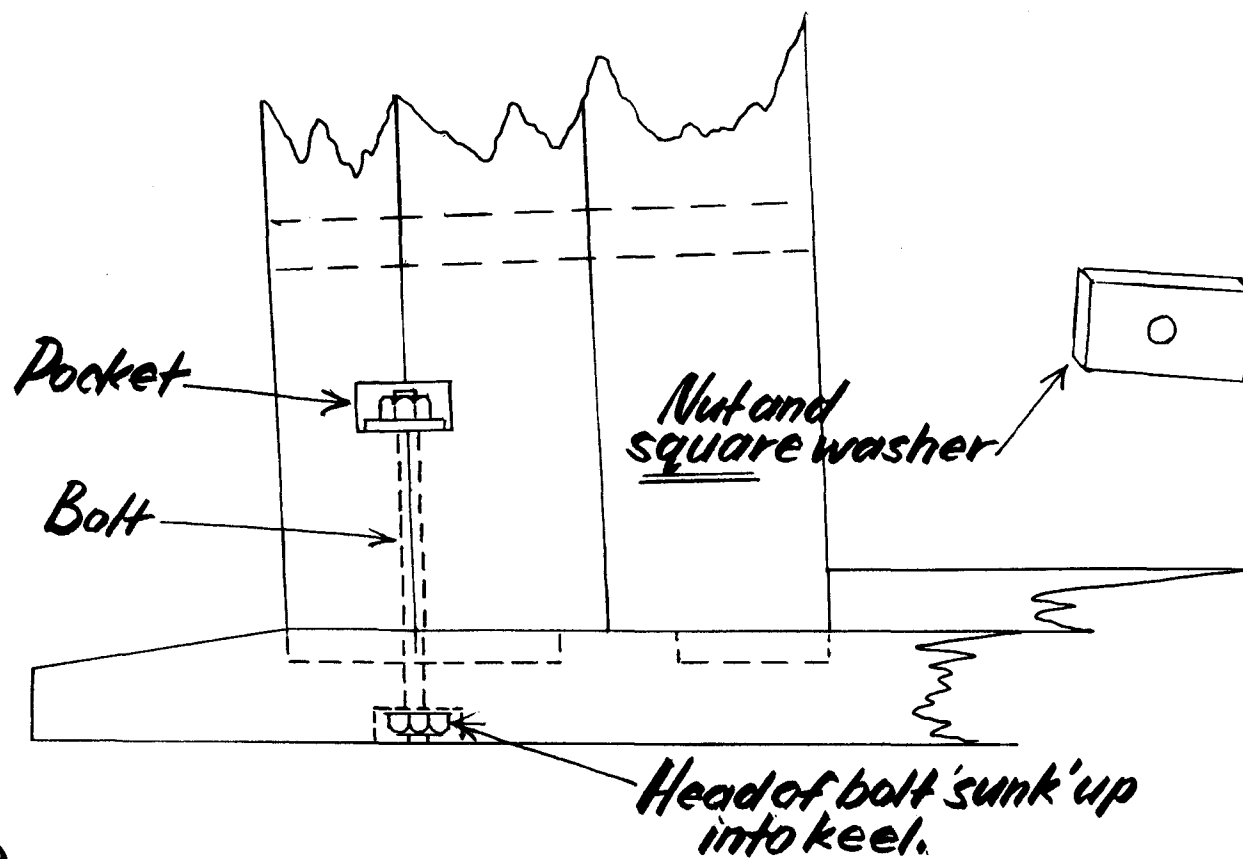
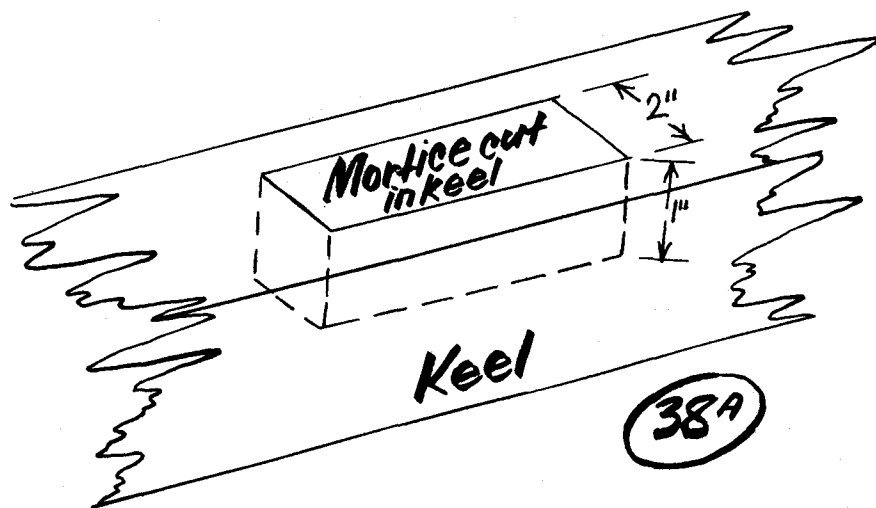
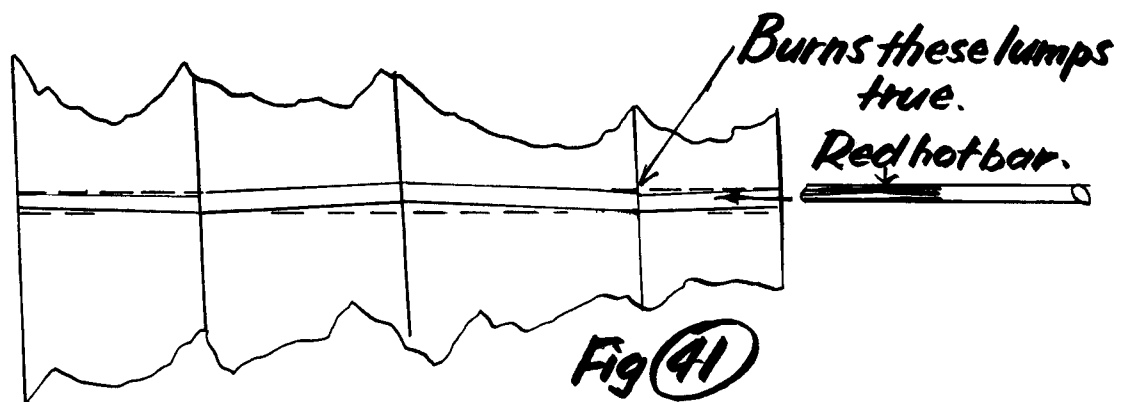
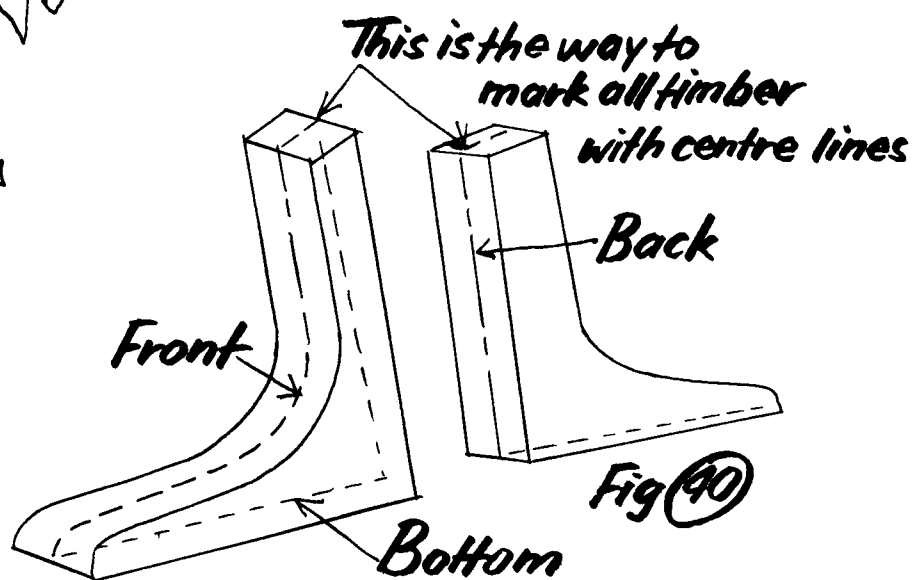
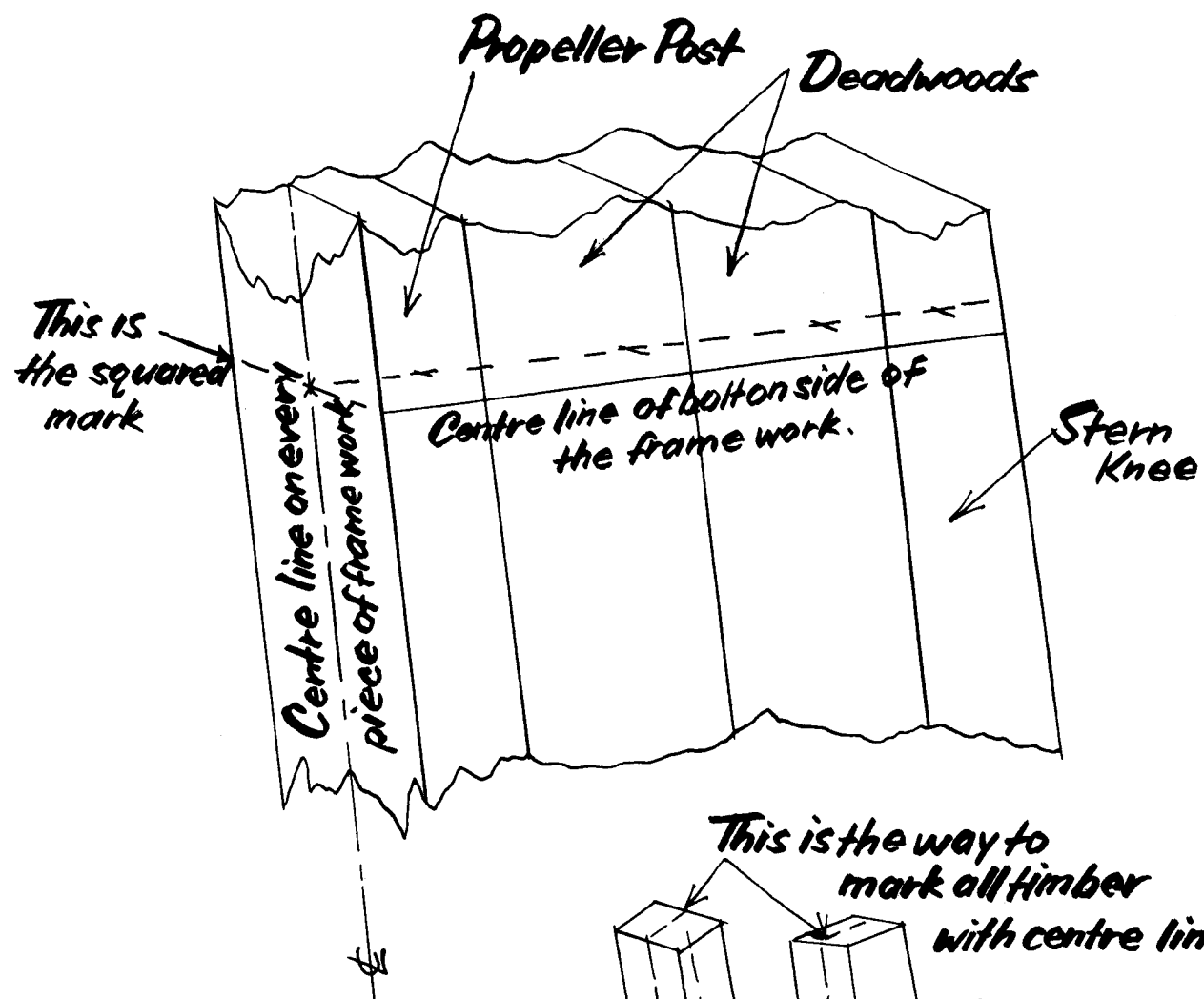
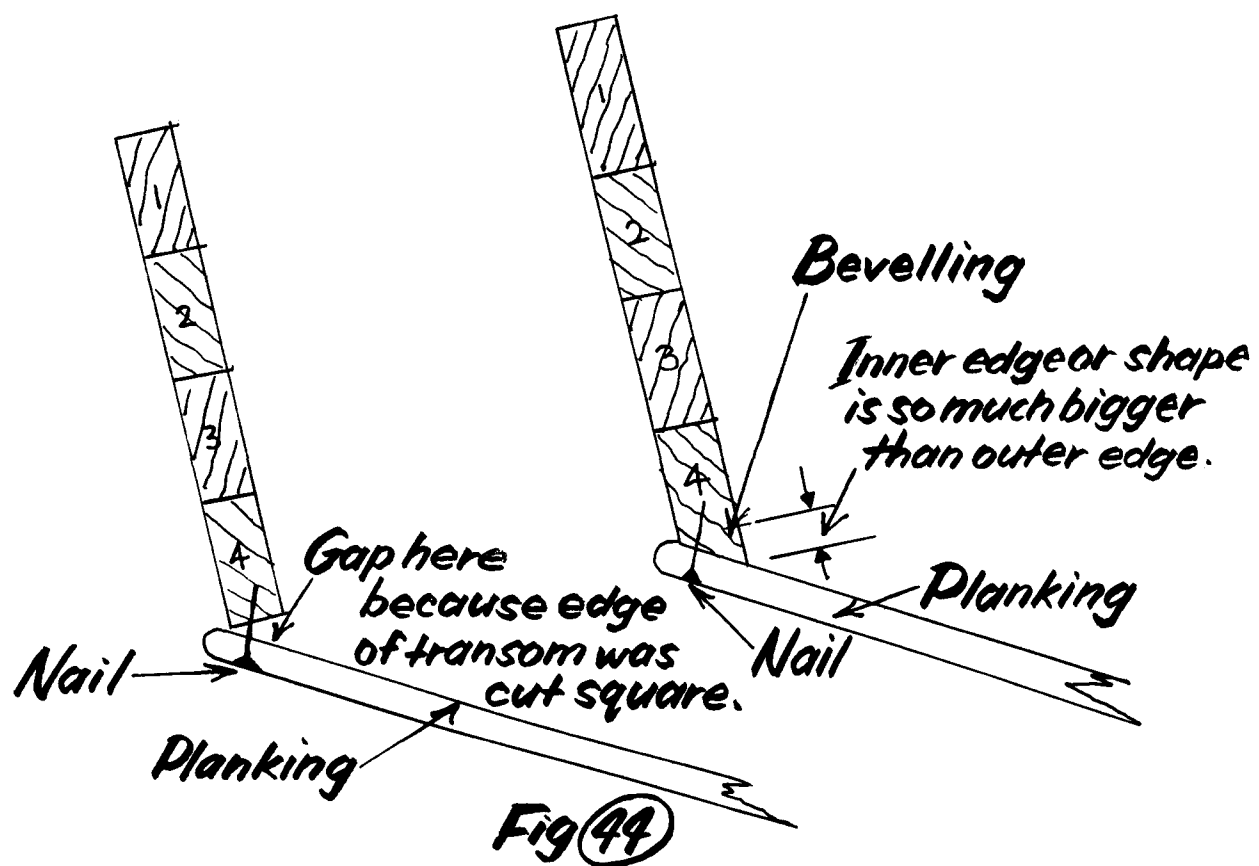
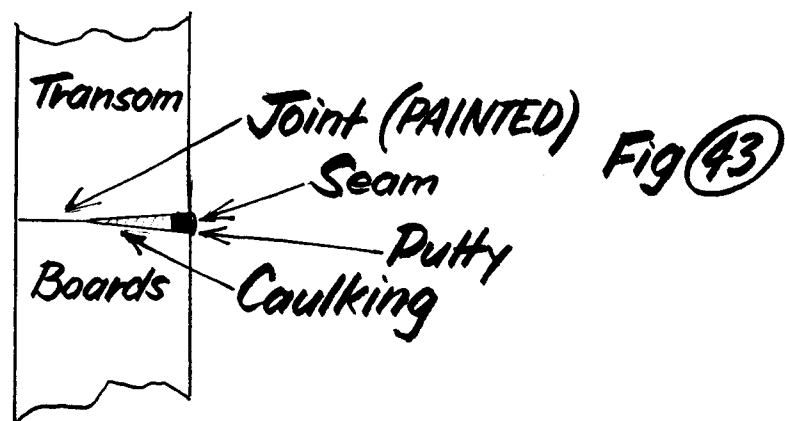
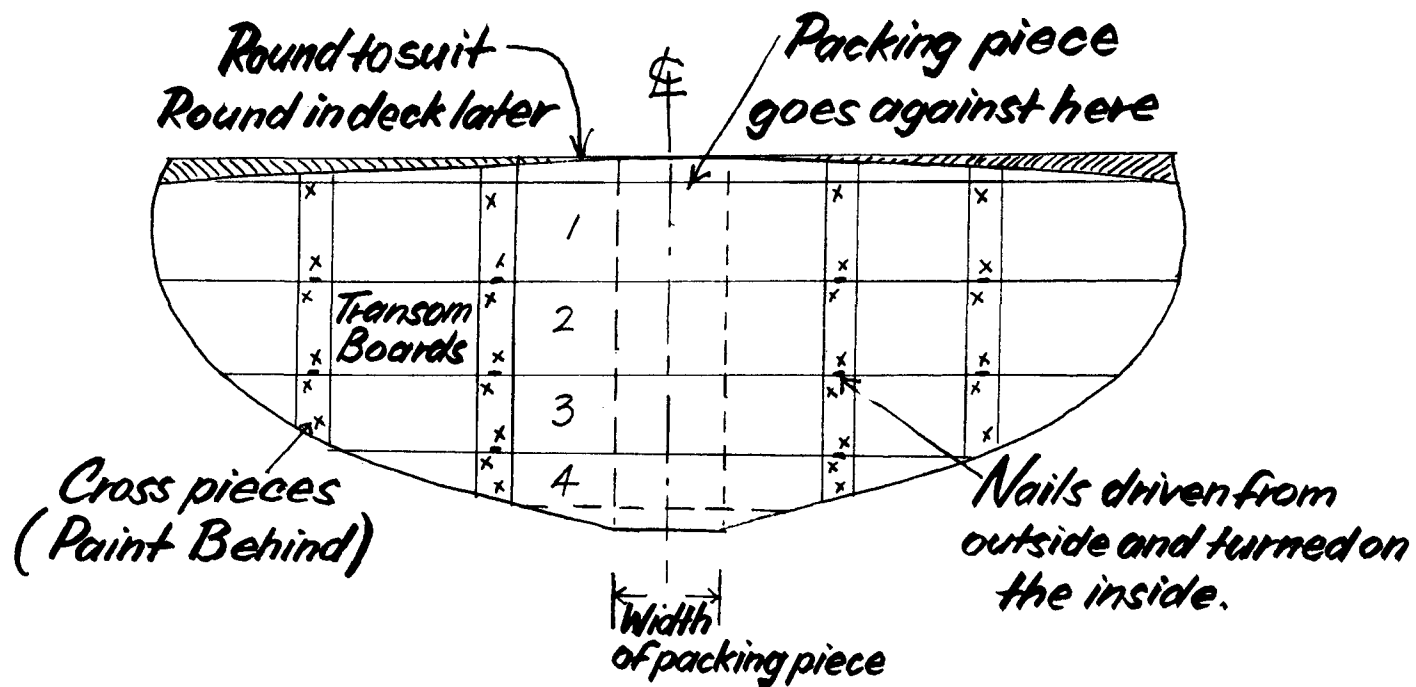


Fig (39)





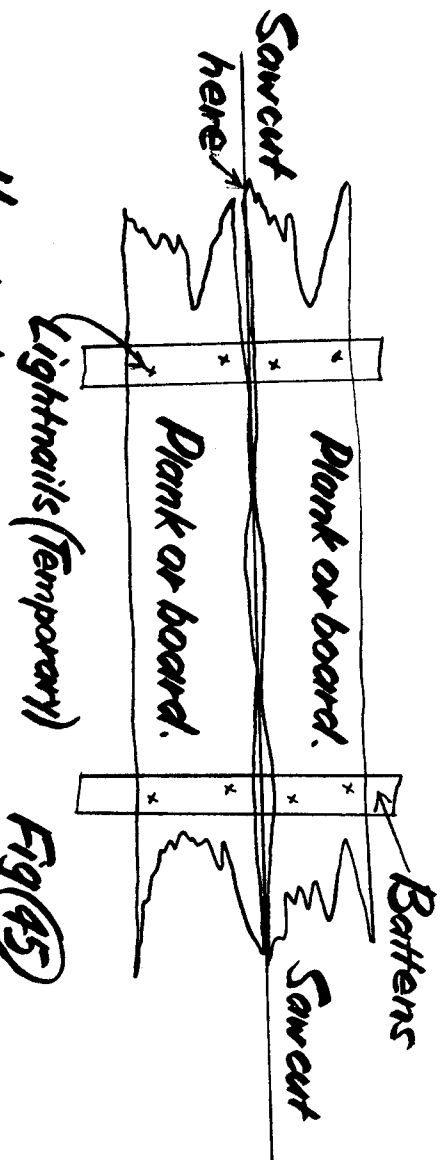


Fig (45)

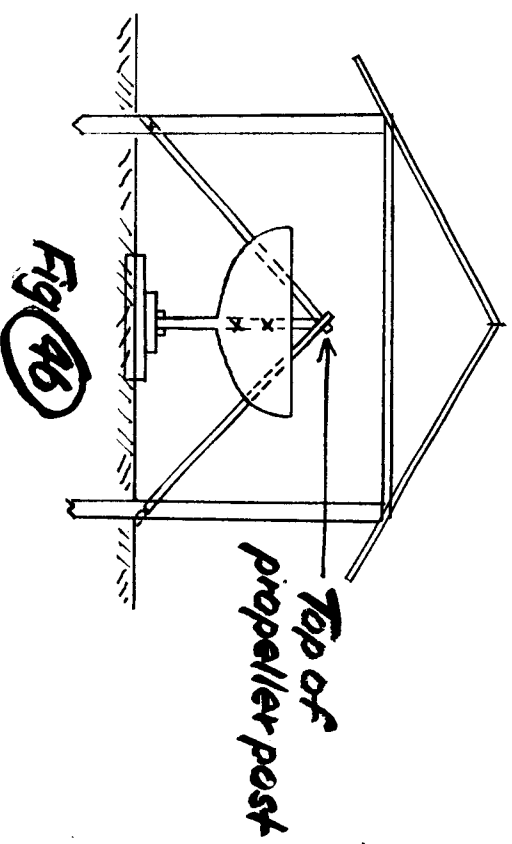


Fig (46)

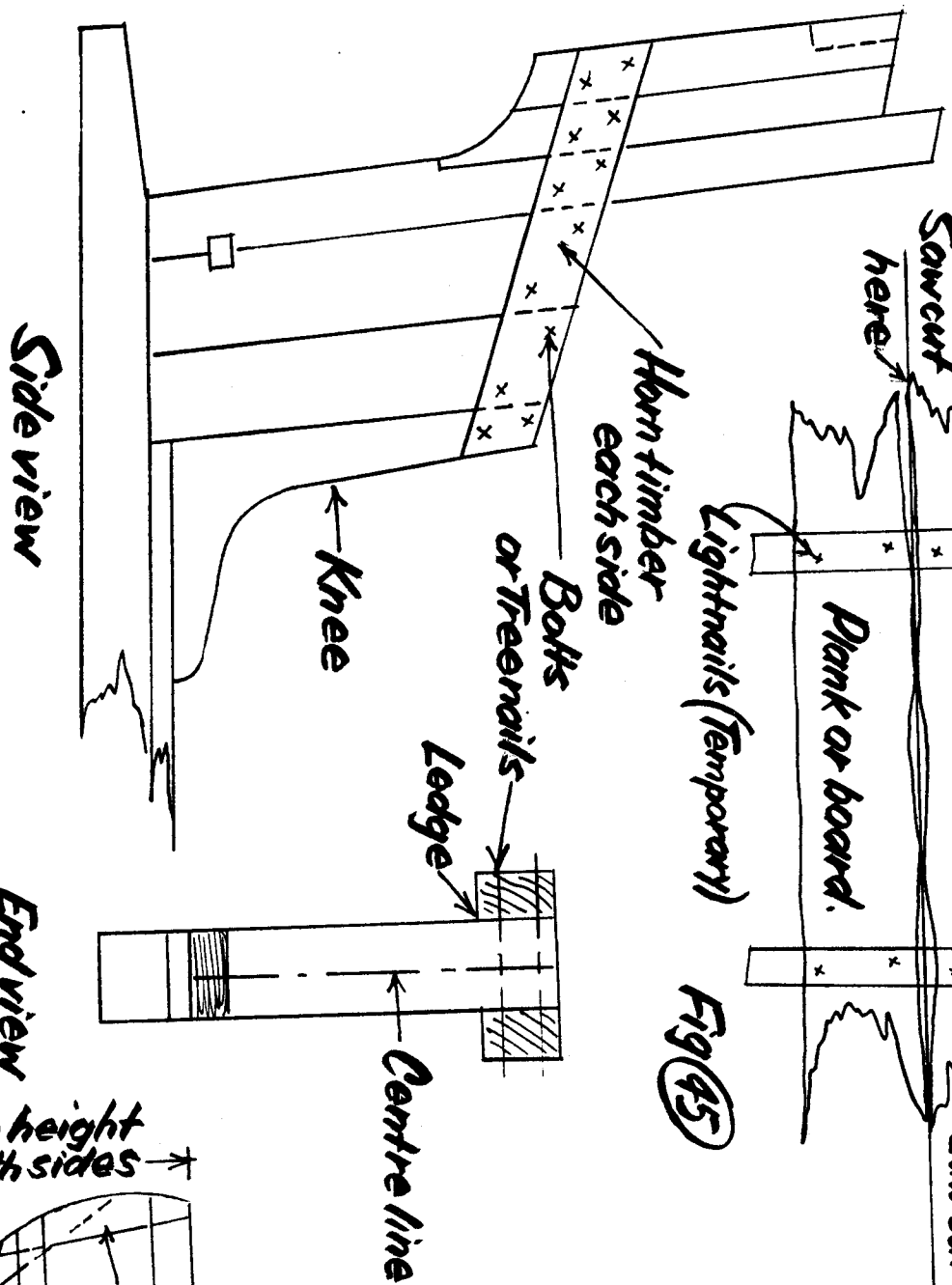


Fig (47)

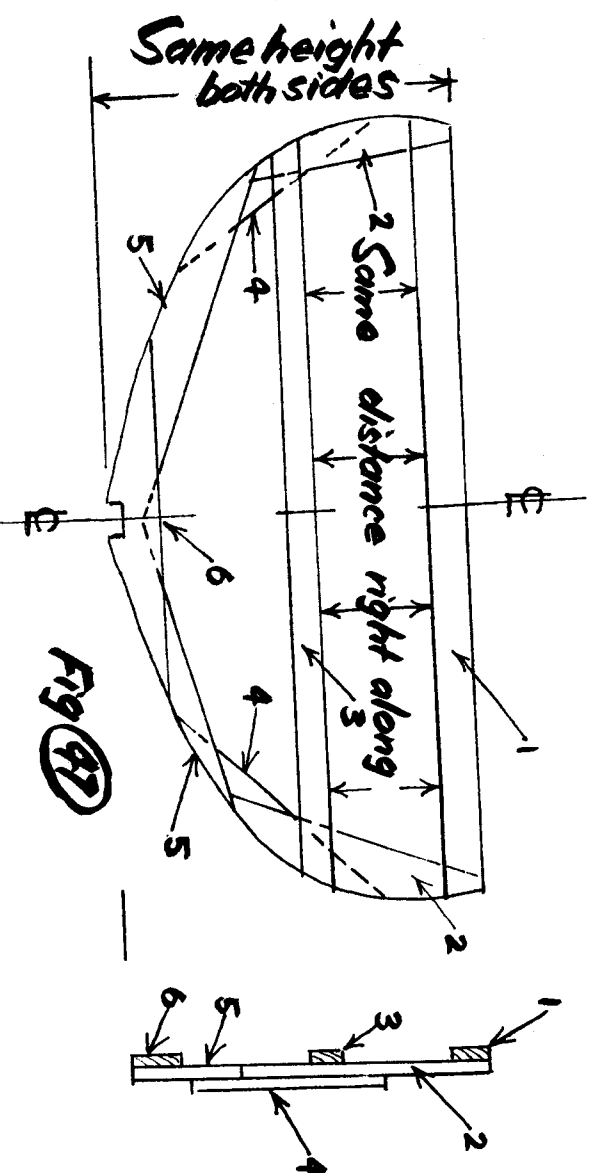
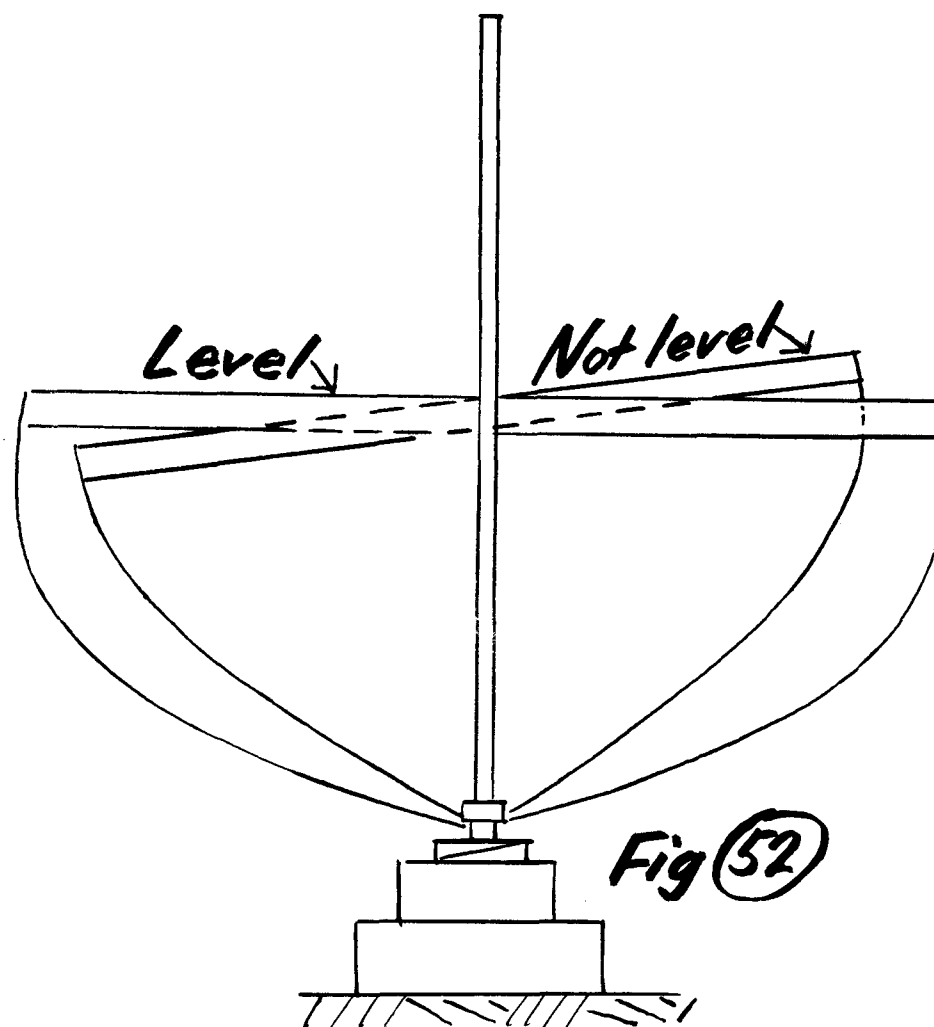
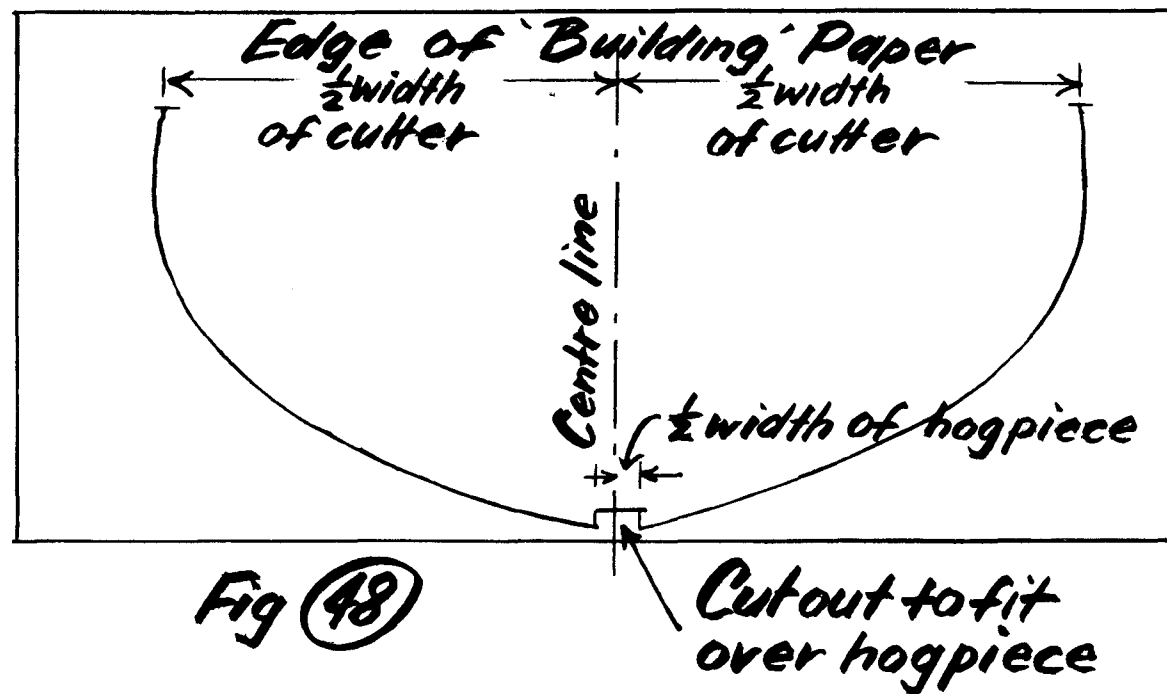


Fig (48)





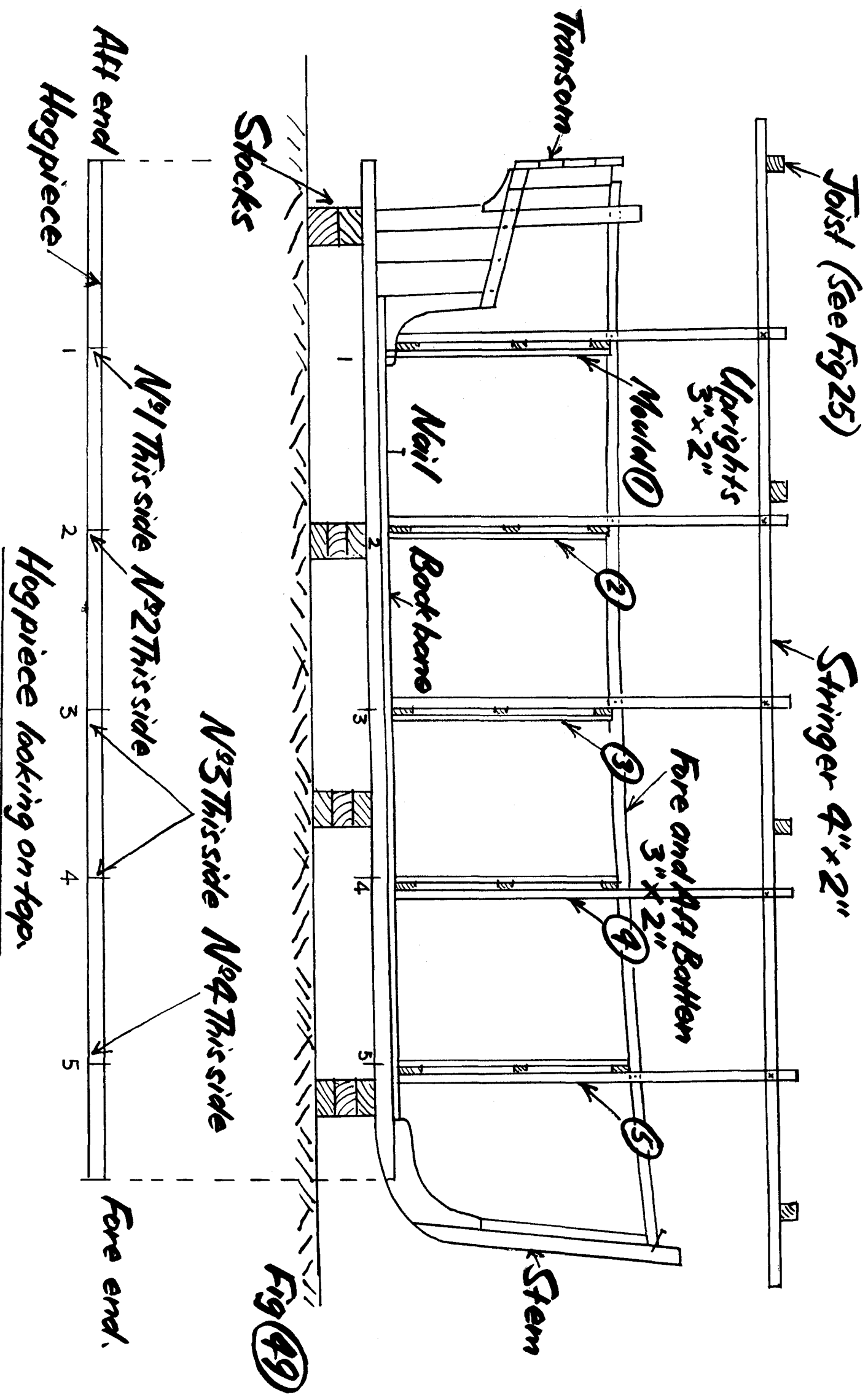
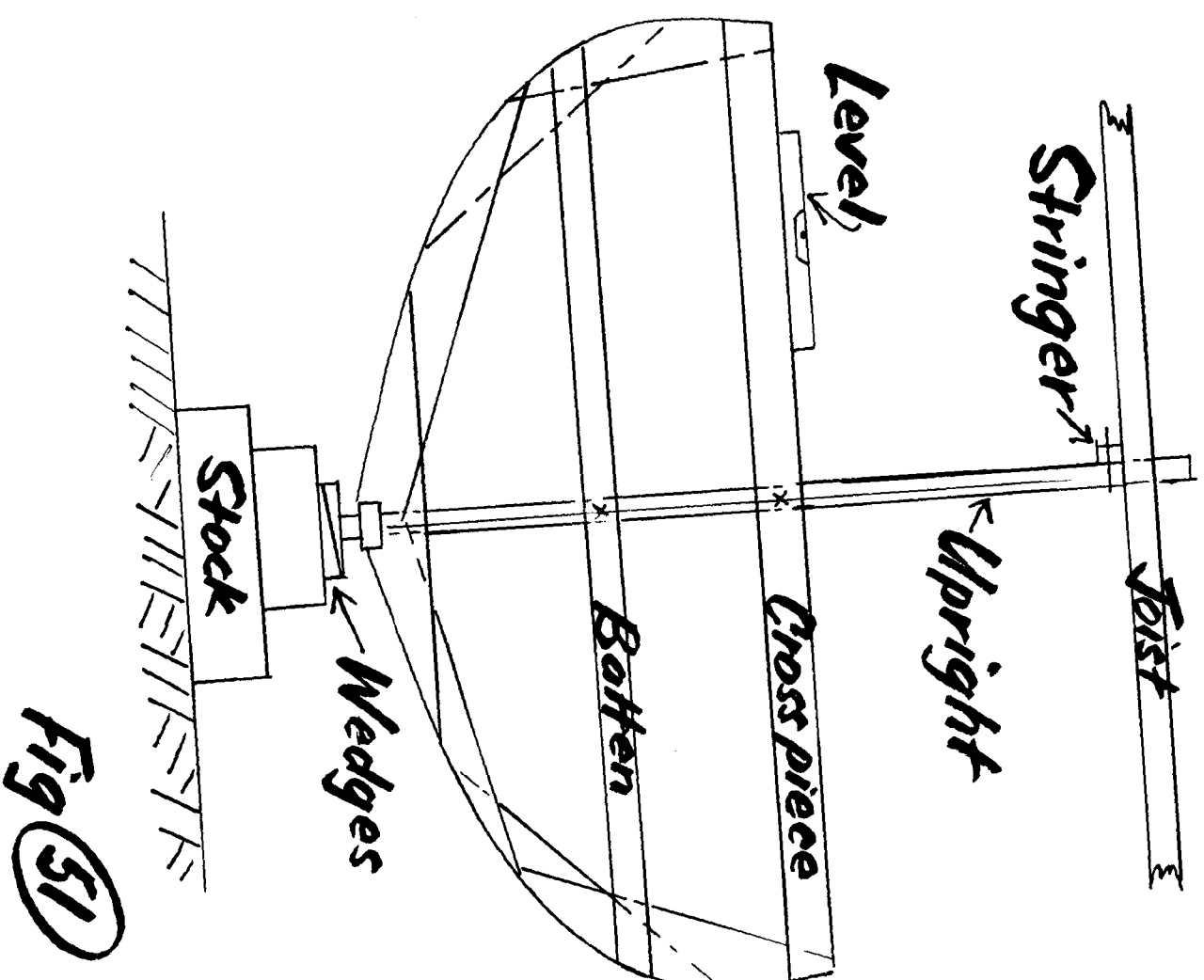
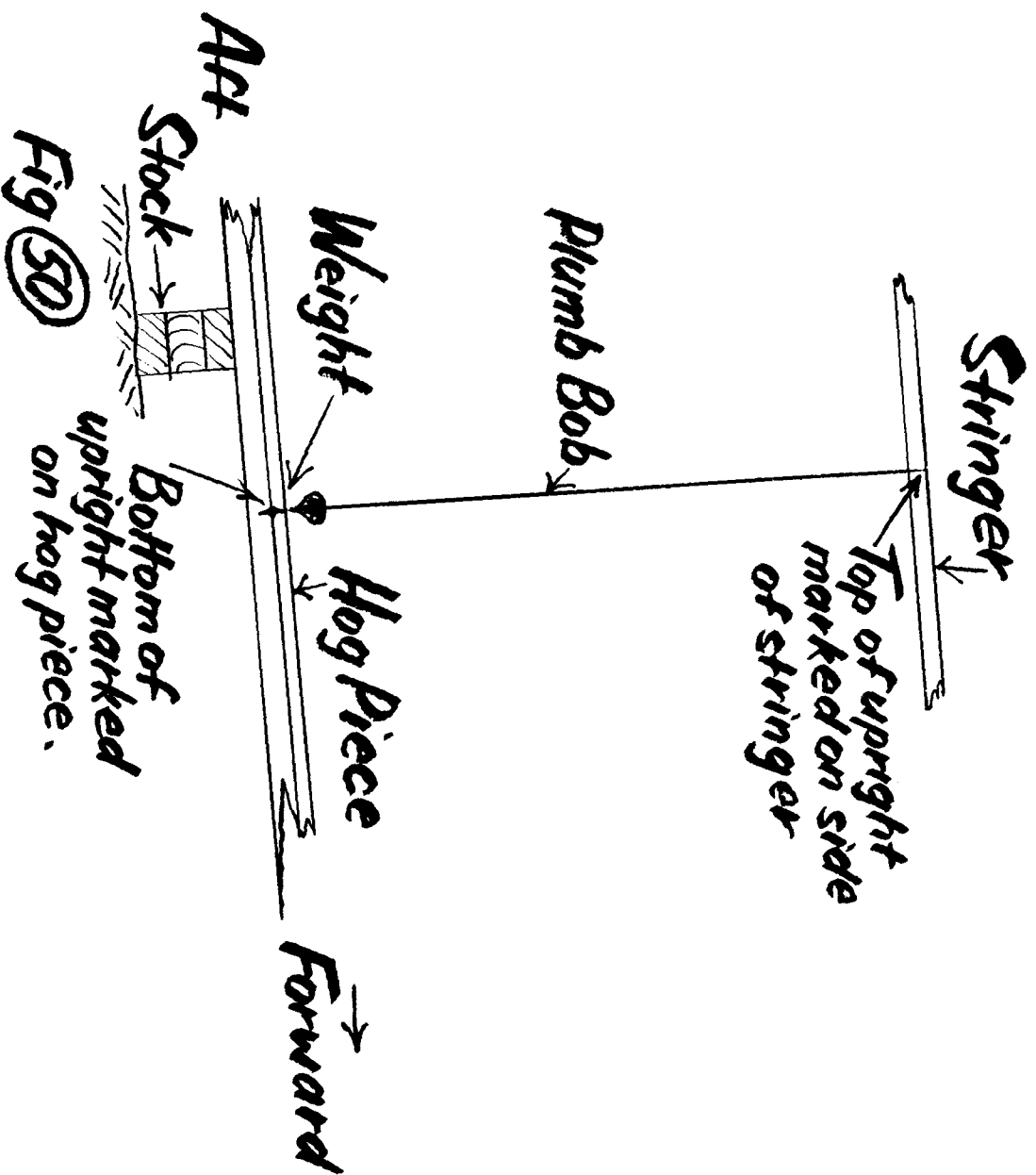
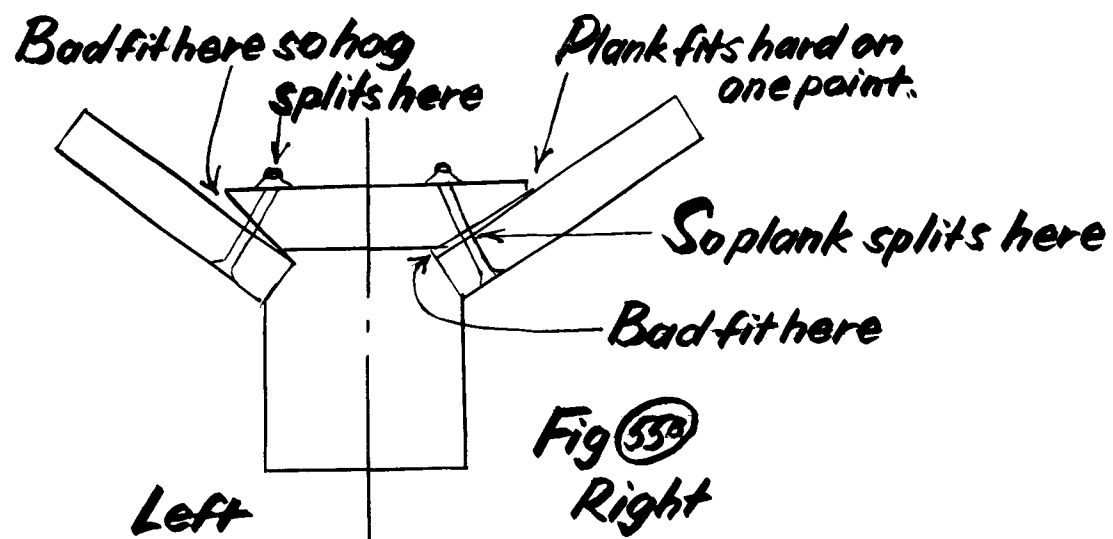
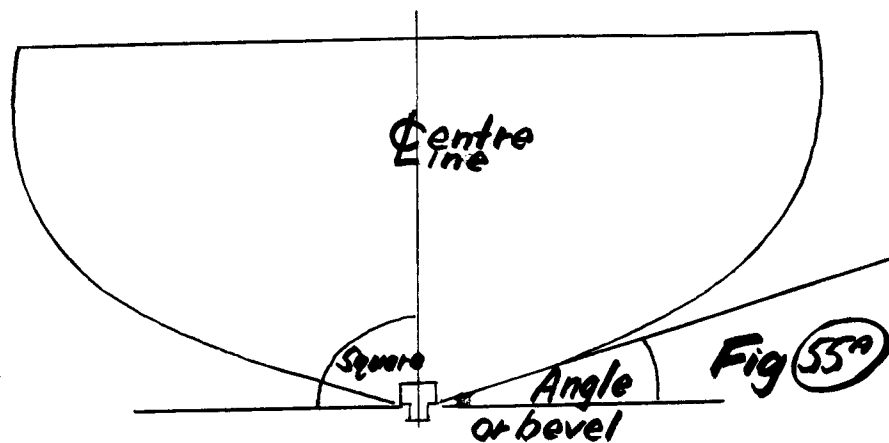
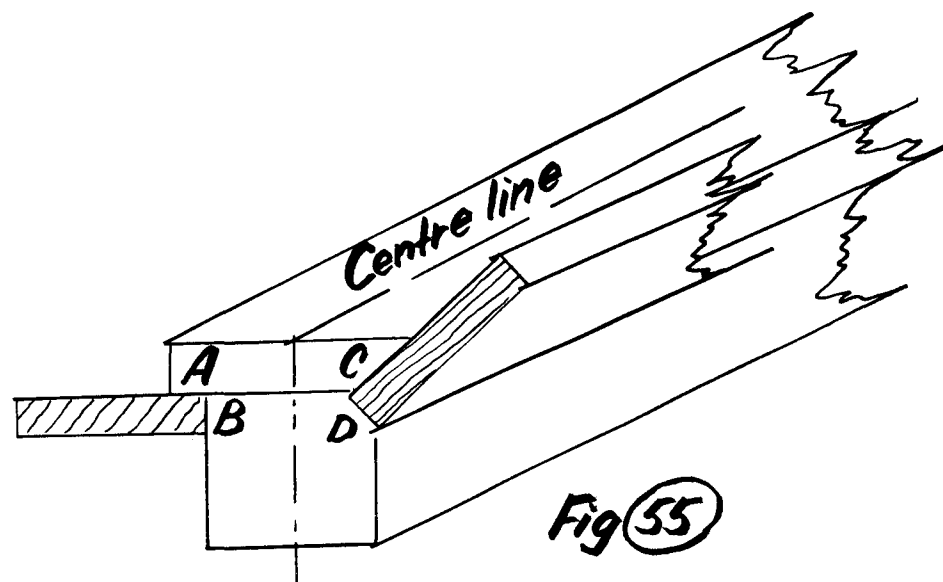
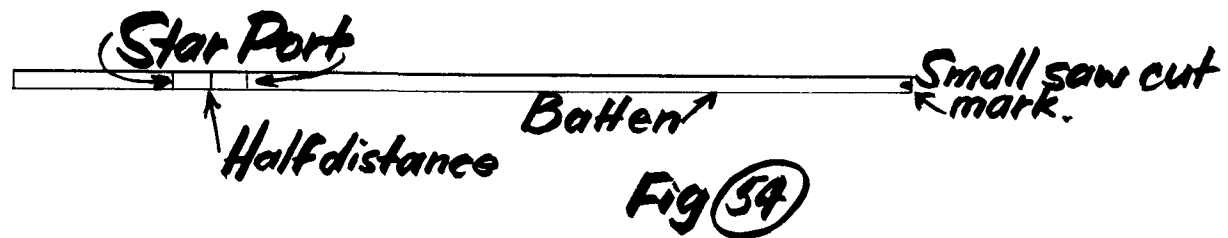
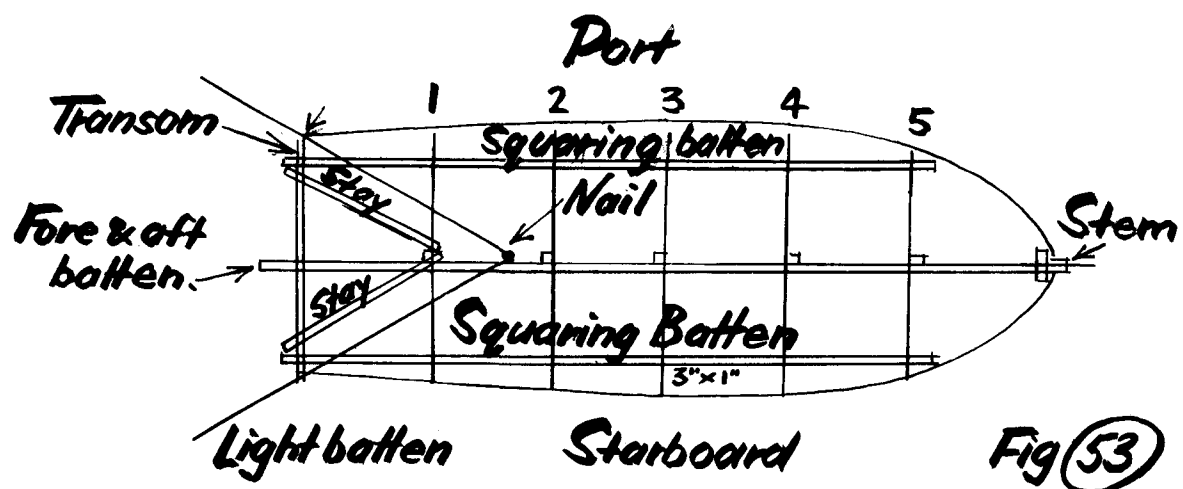
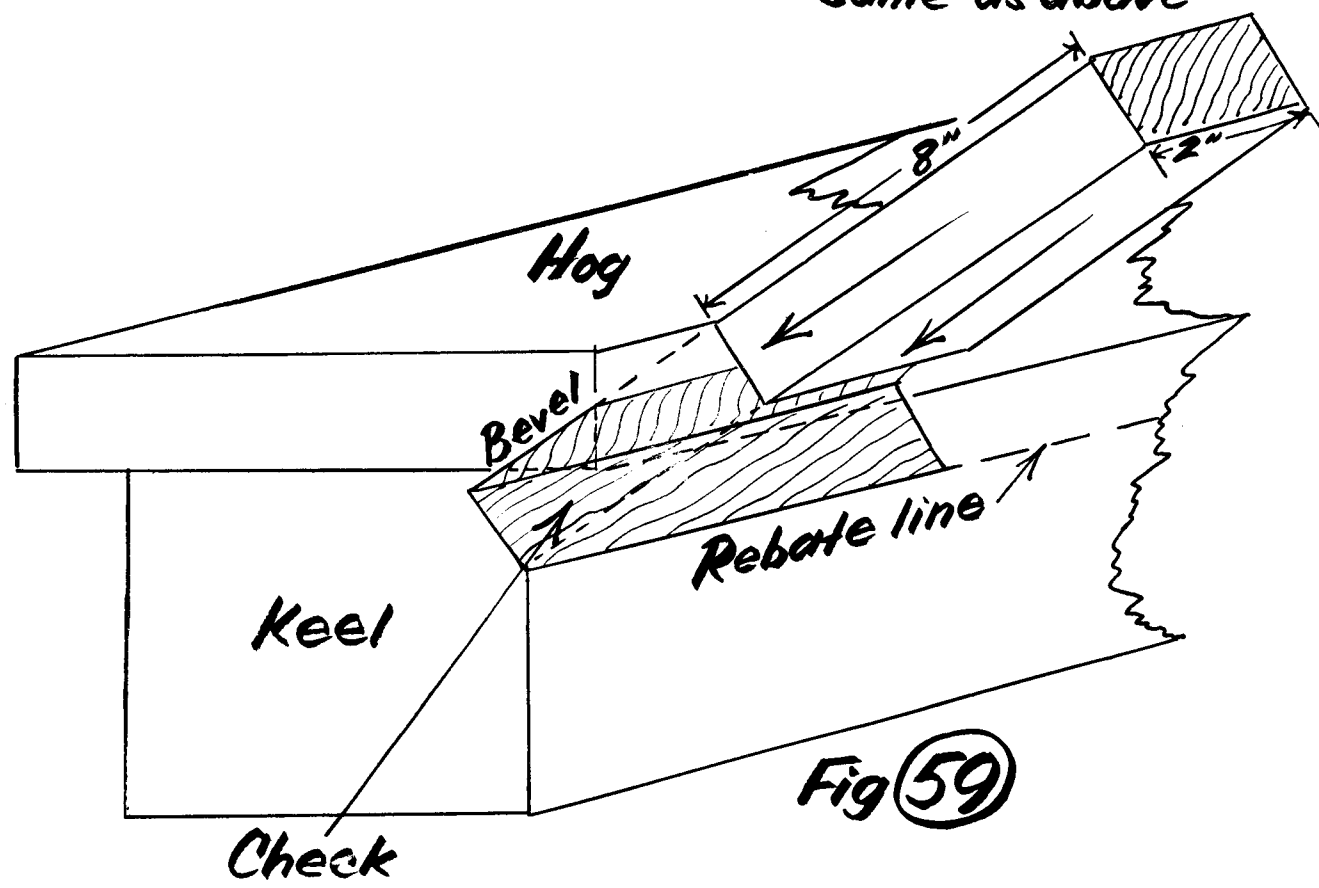
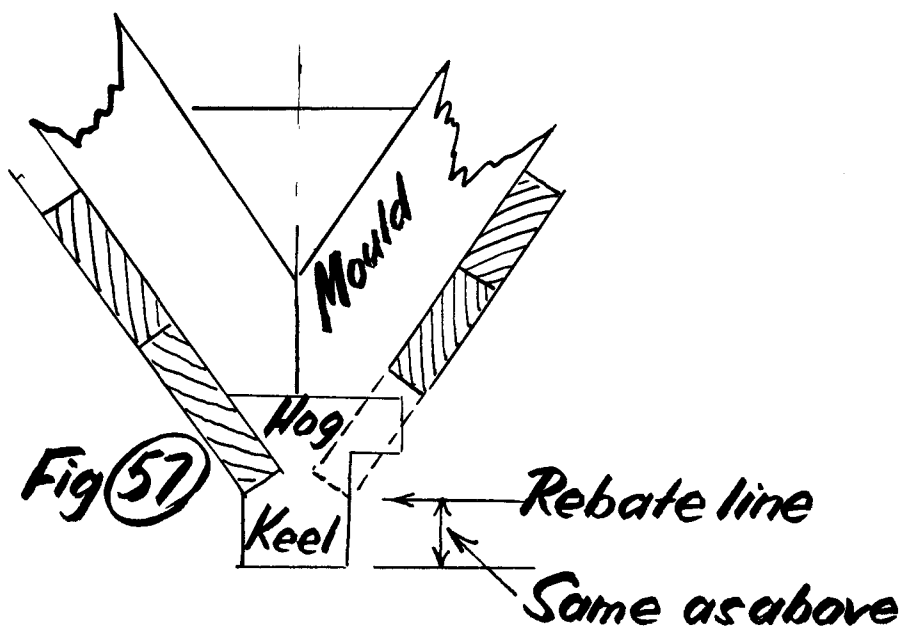
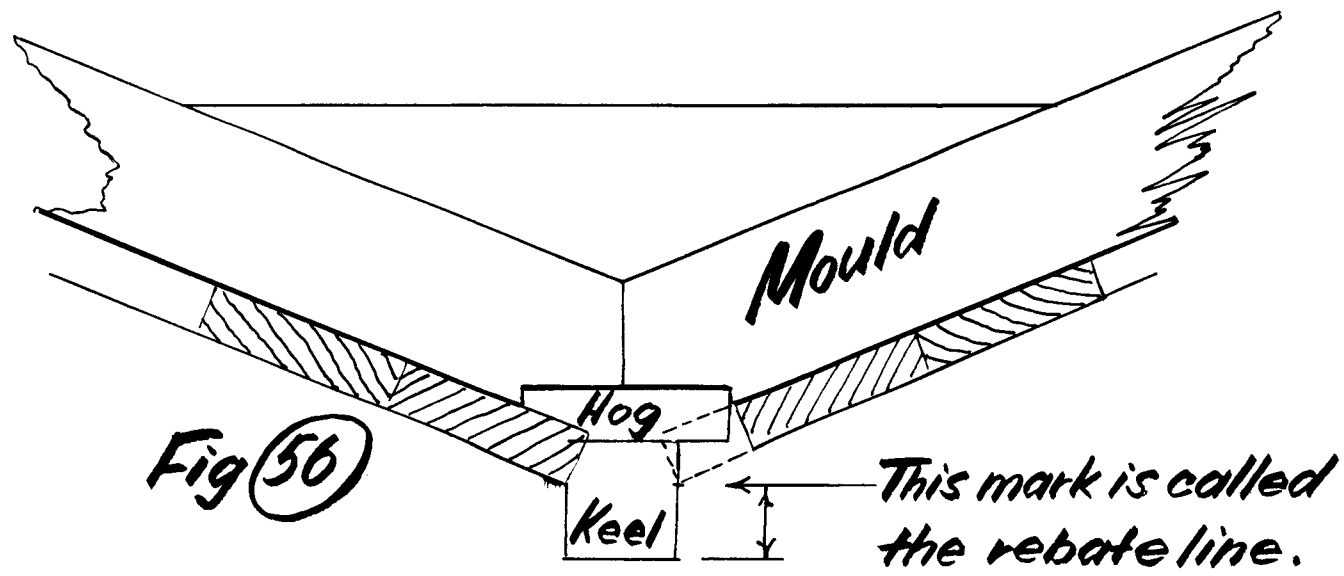


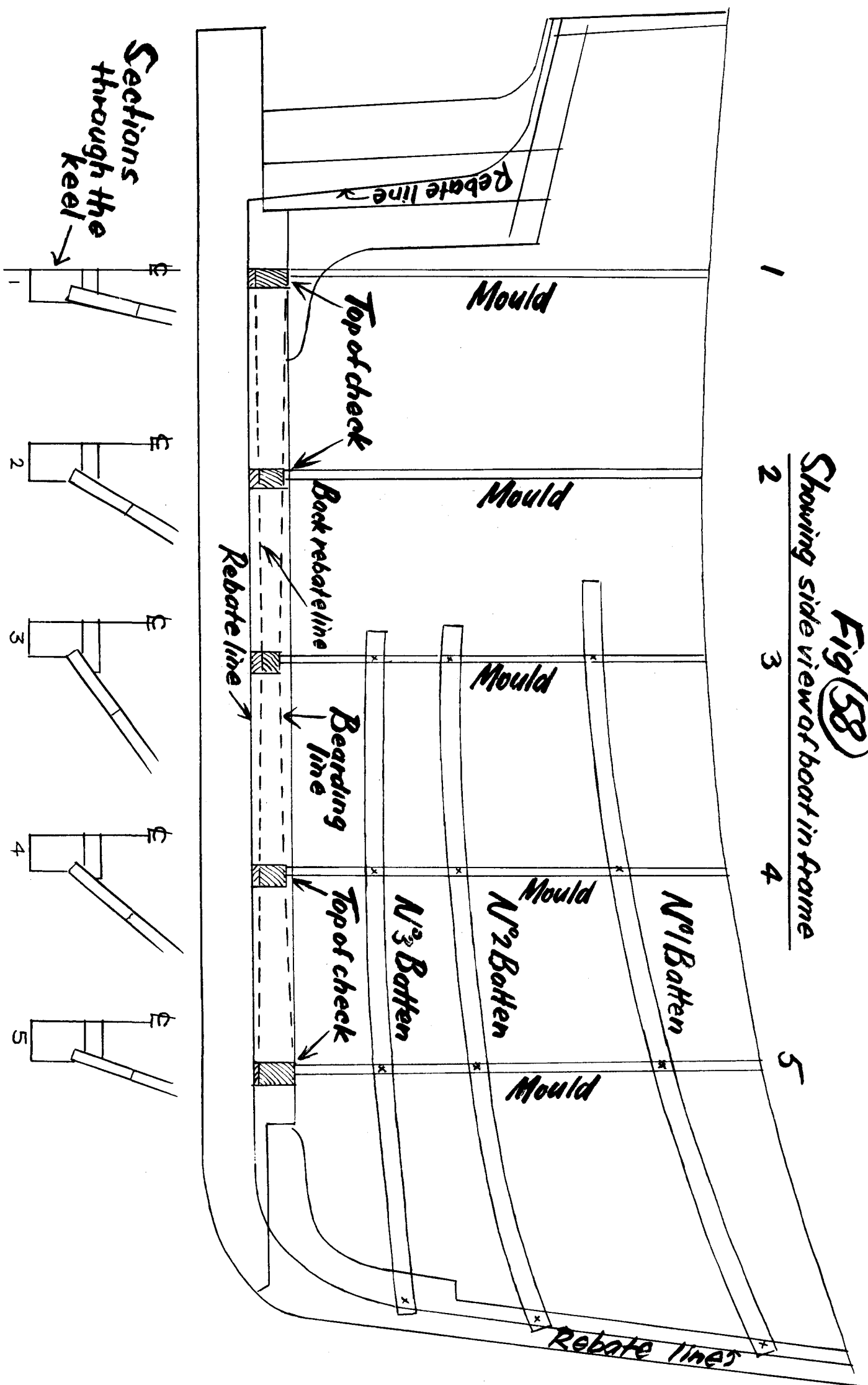
Fig 49







**Fig 58**  
 Showing side view of boat in frame



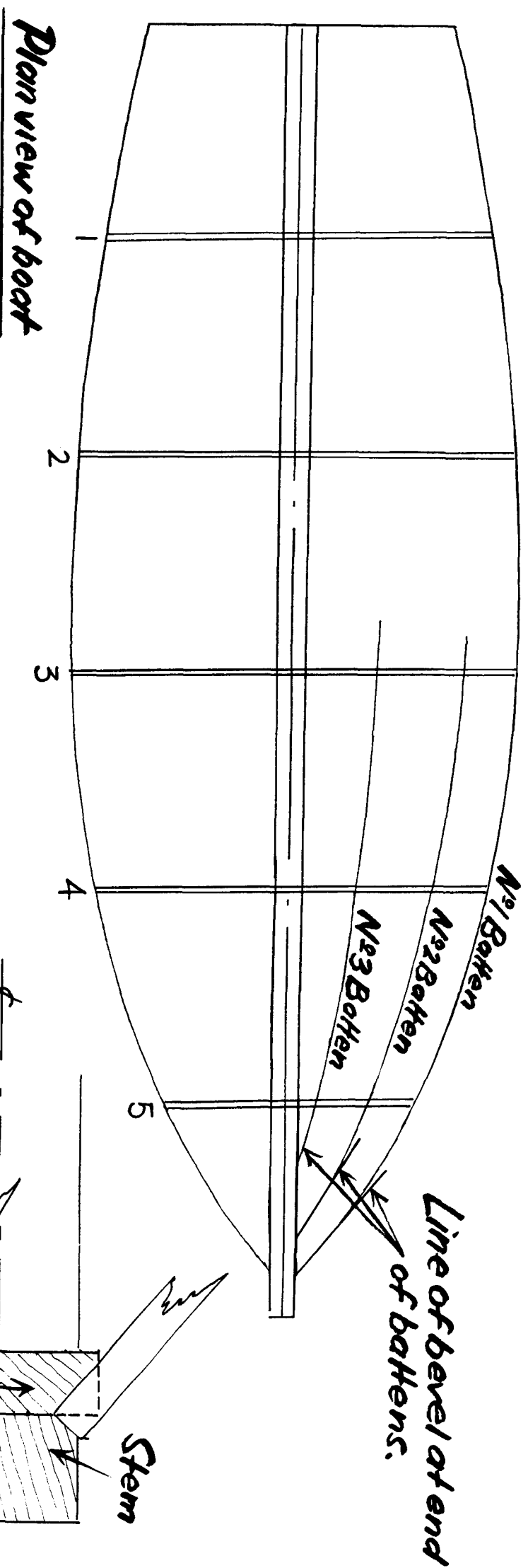
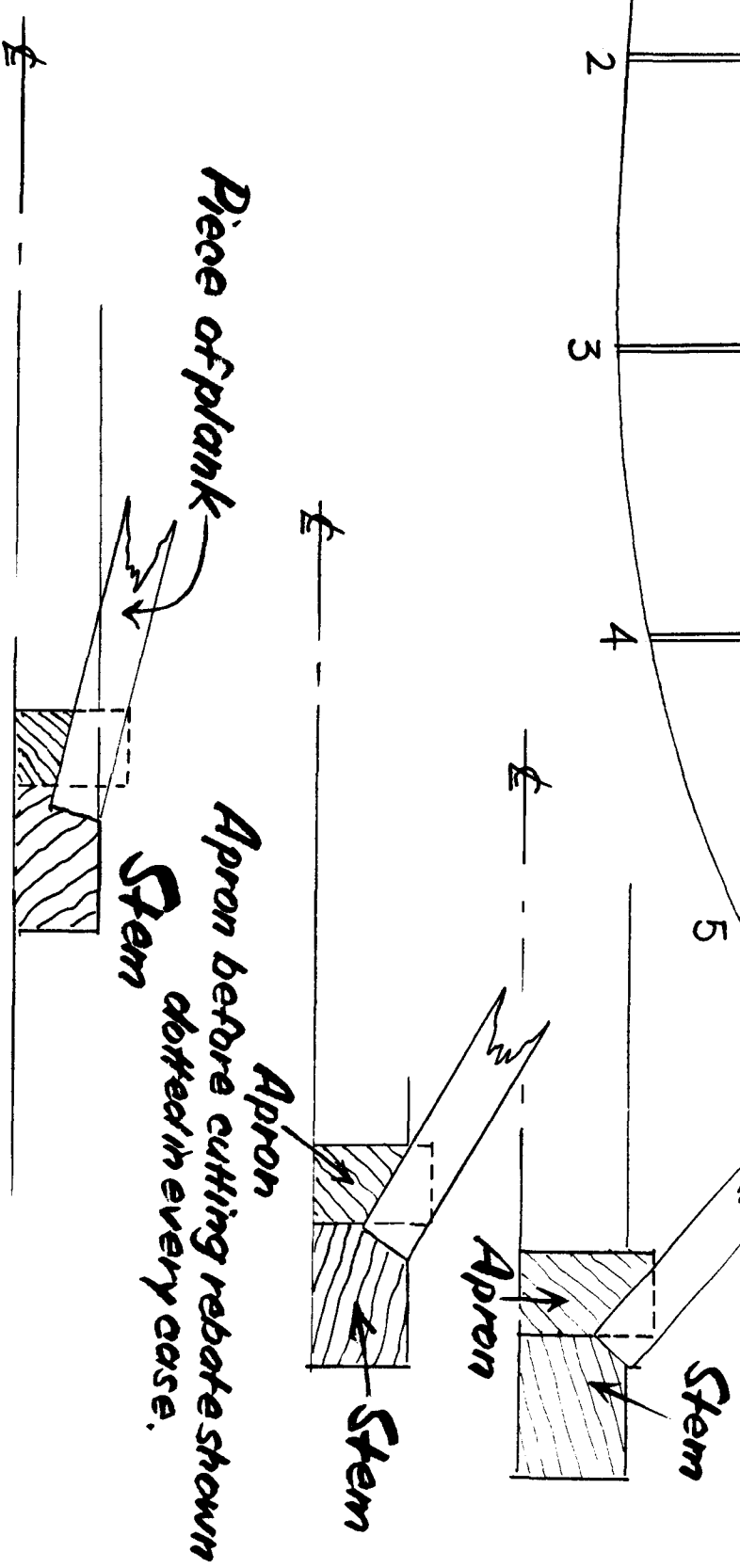


Fig 60



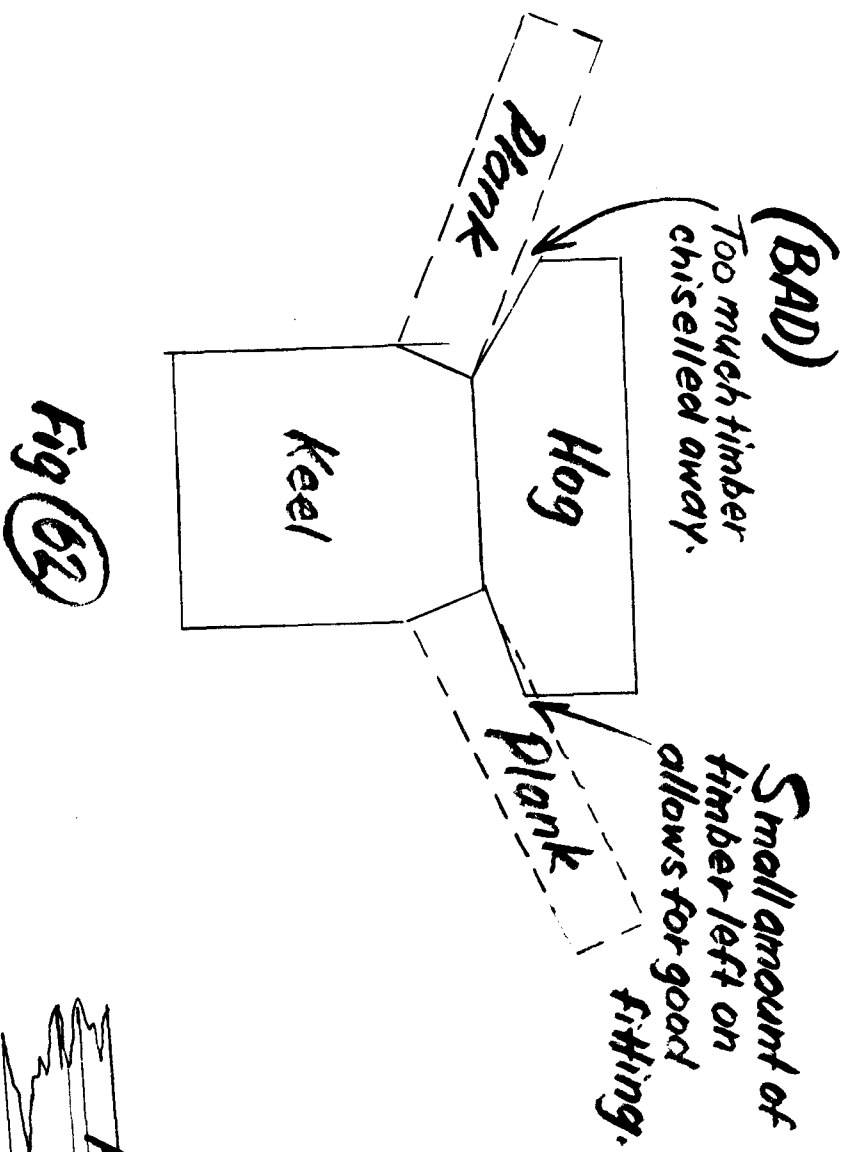


Fig 62

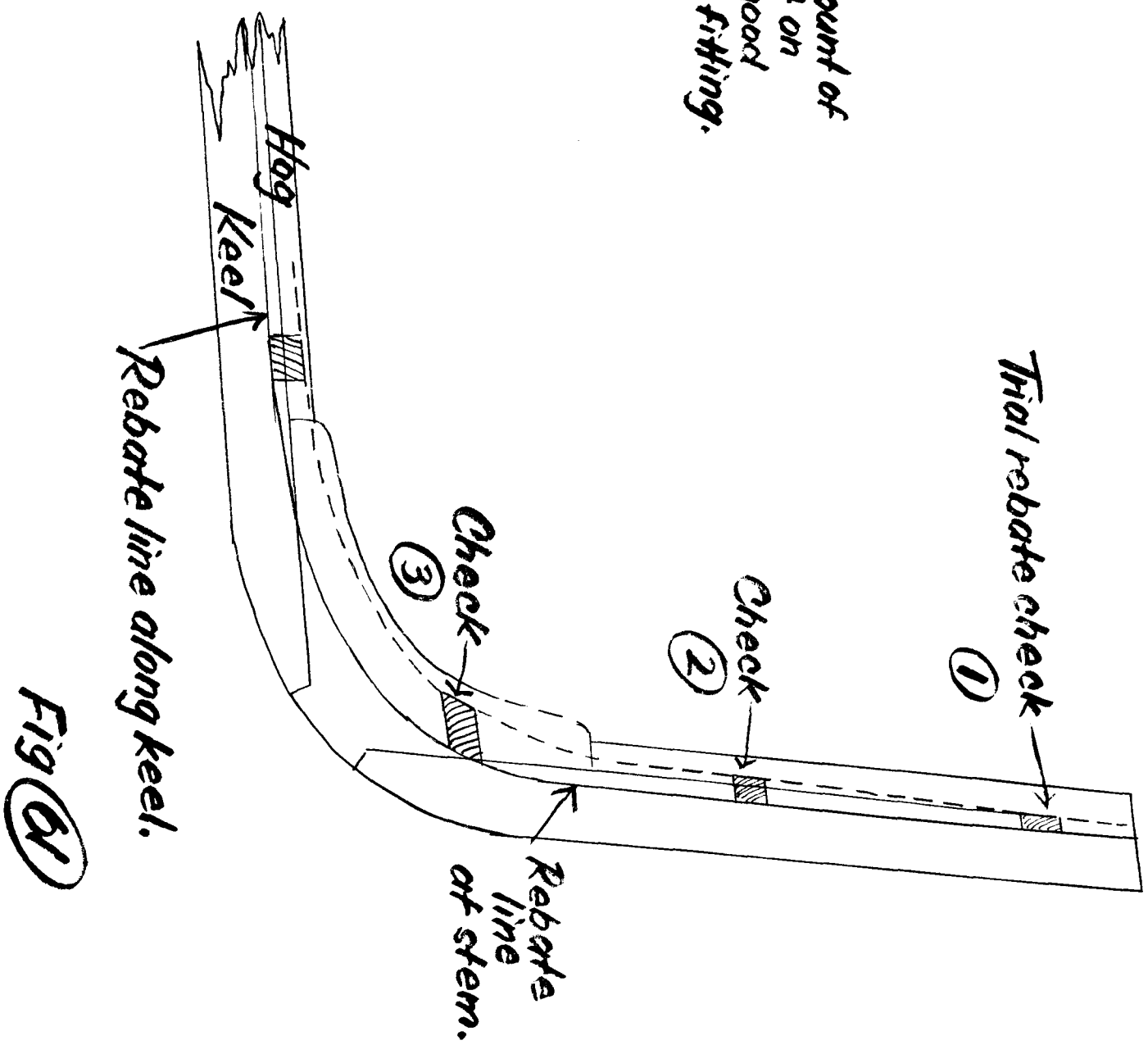


Fig 61

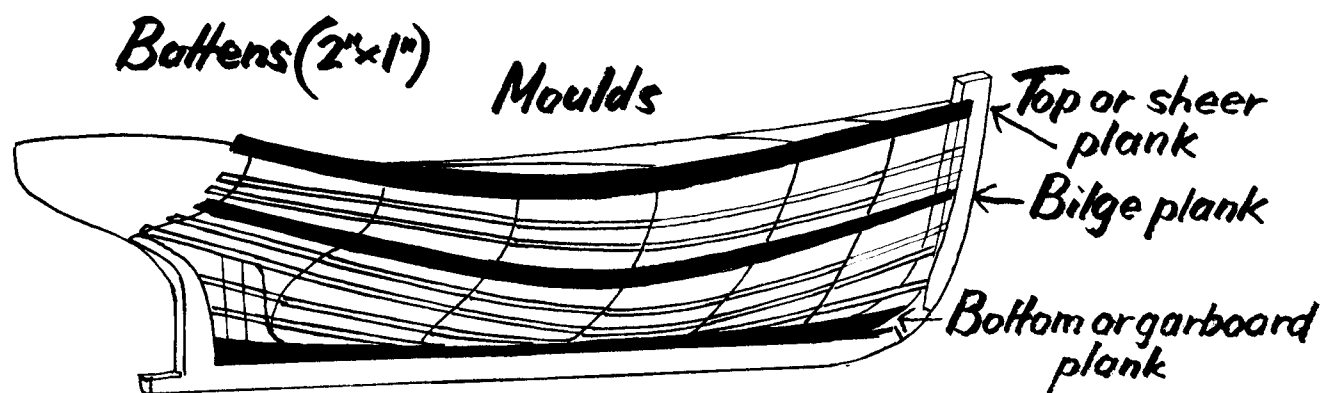


Fig (63)

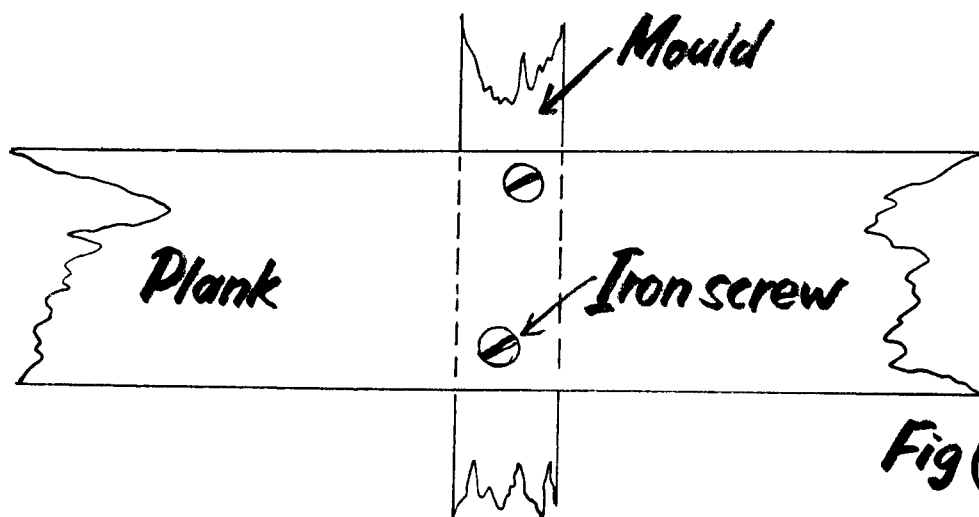
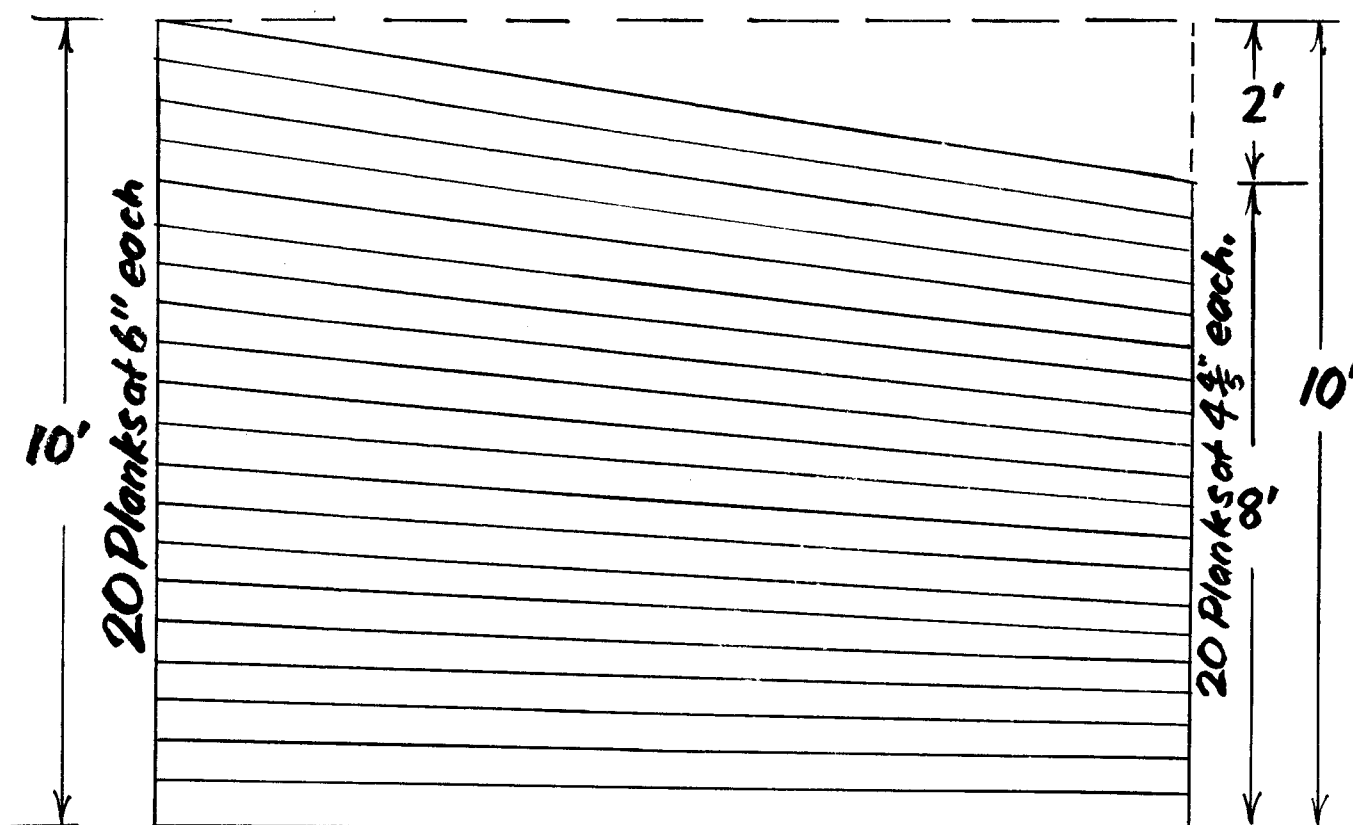


Fig (63B)



$$10' = 10 \times 12 = 120''$$

$$120'' \div 20 = 6''$$

$$8' = 8 \times 12 = 96''$$

$$96'' \div 20 = 4 \frac{4}{5}''$$

$$6'' \text{ minus } 4 \frac{4}{5}'' = \underline{1 \frac{1}{5}''} \text{ taper.}$$

Fig (64)



Fig (65)

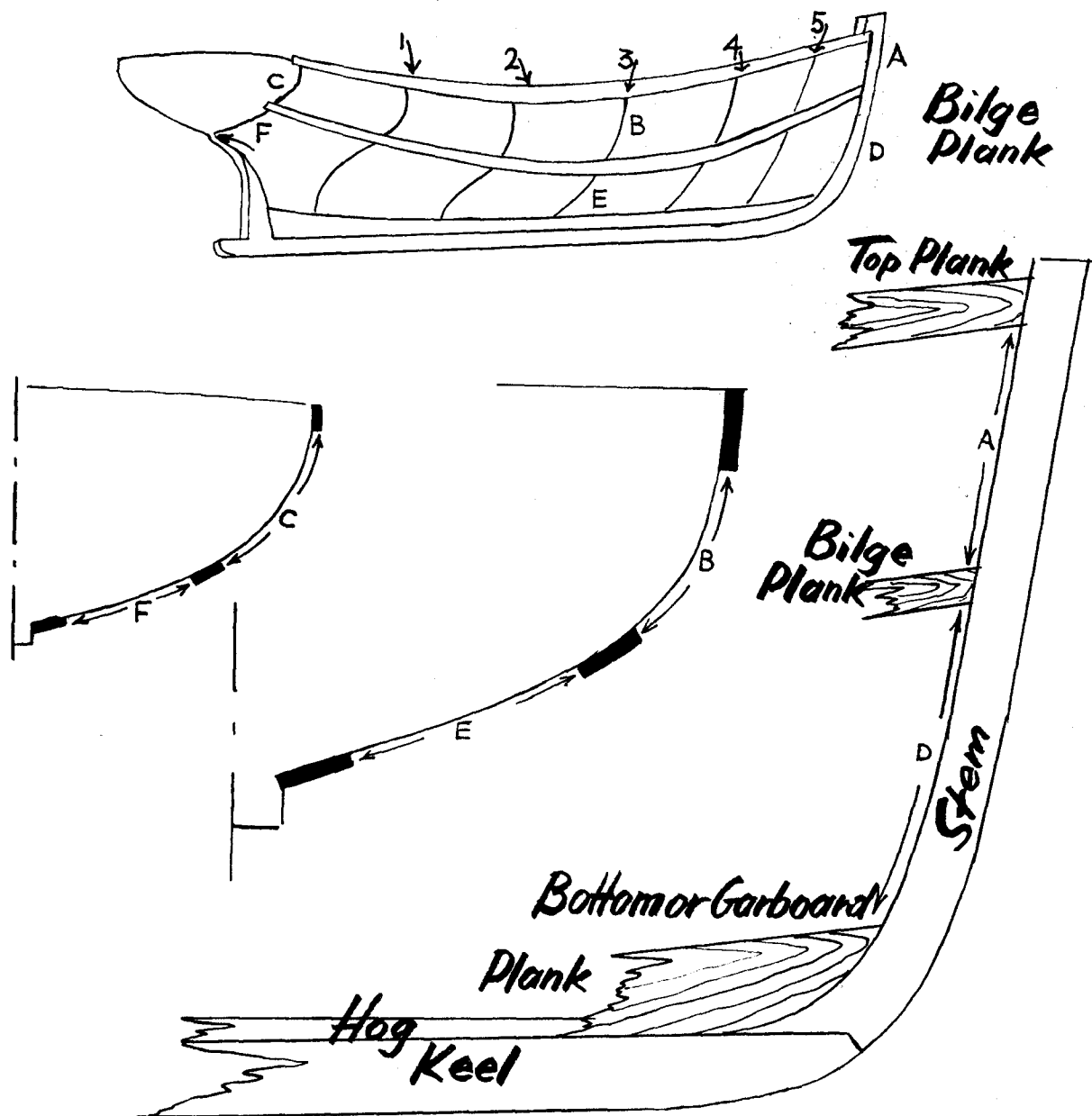
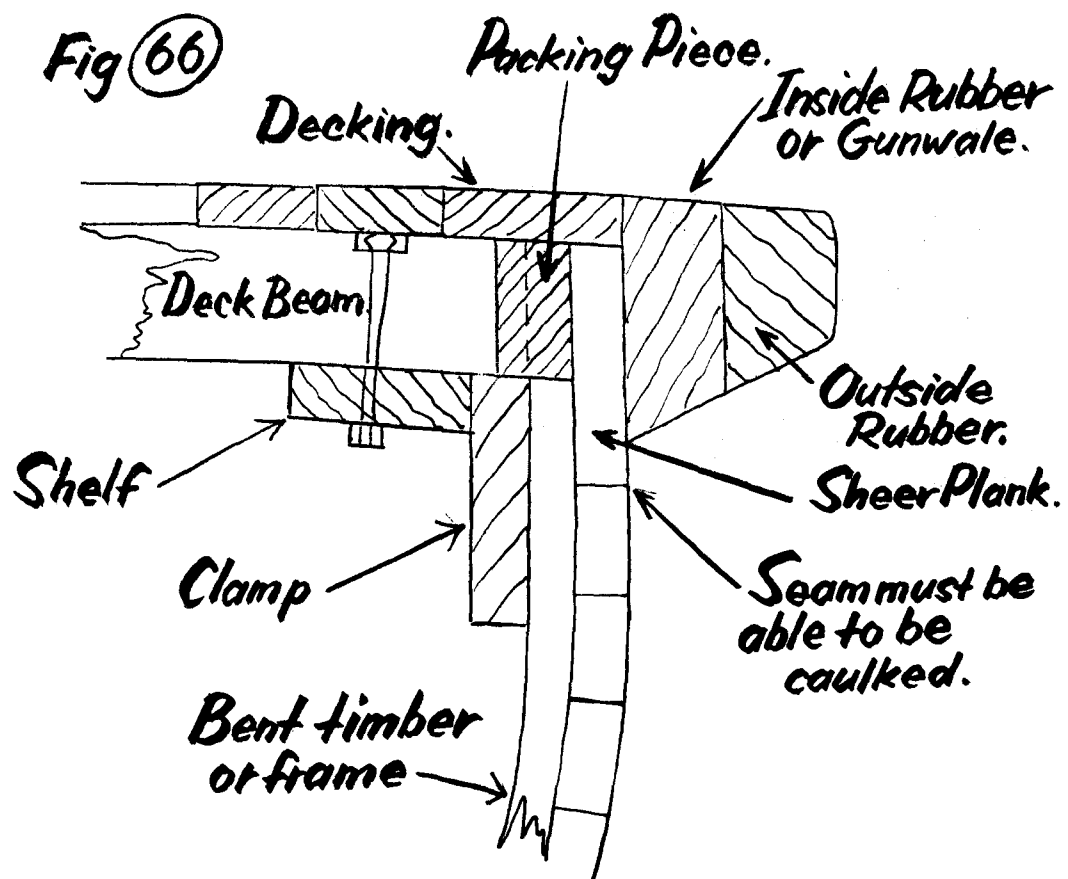


Fig (66)



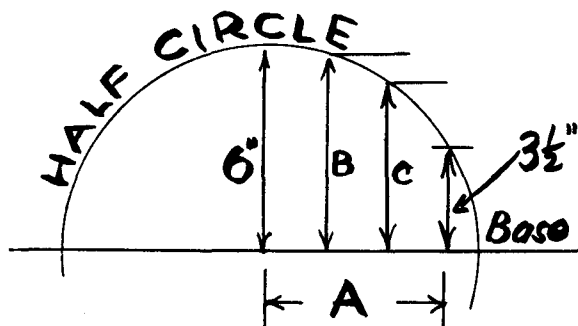


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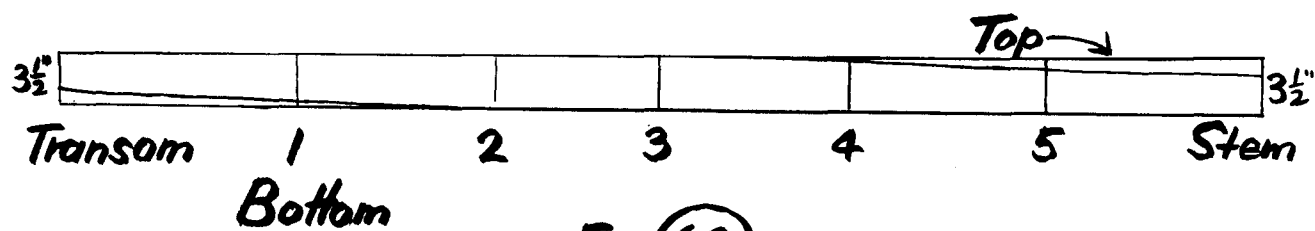


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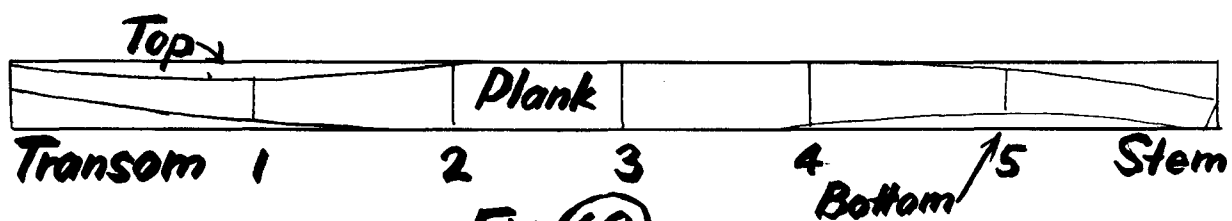


Fig (69)

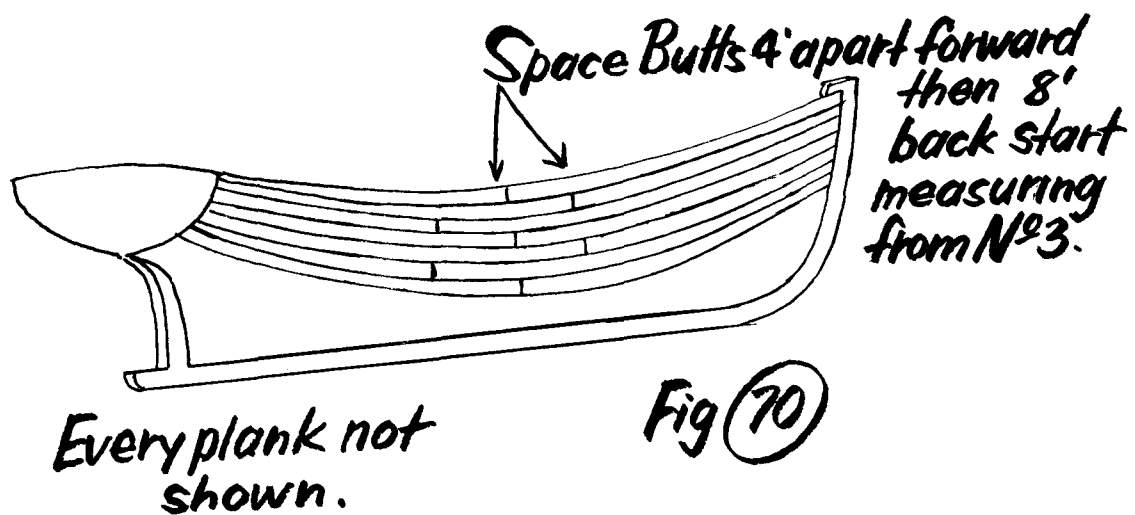
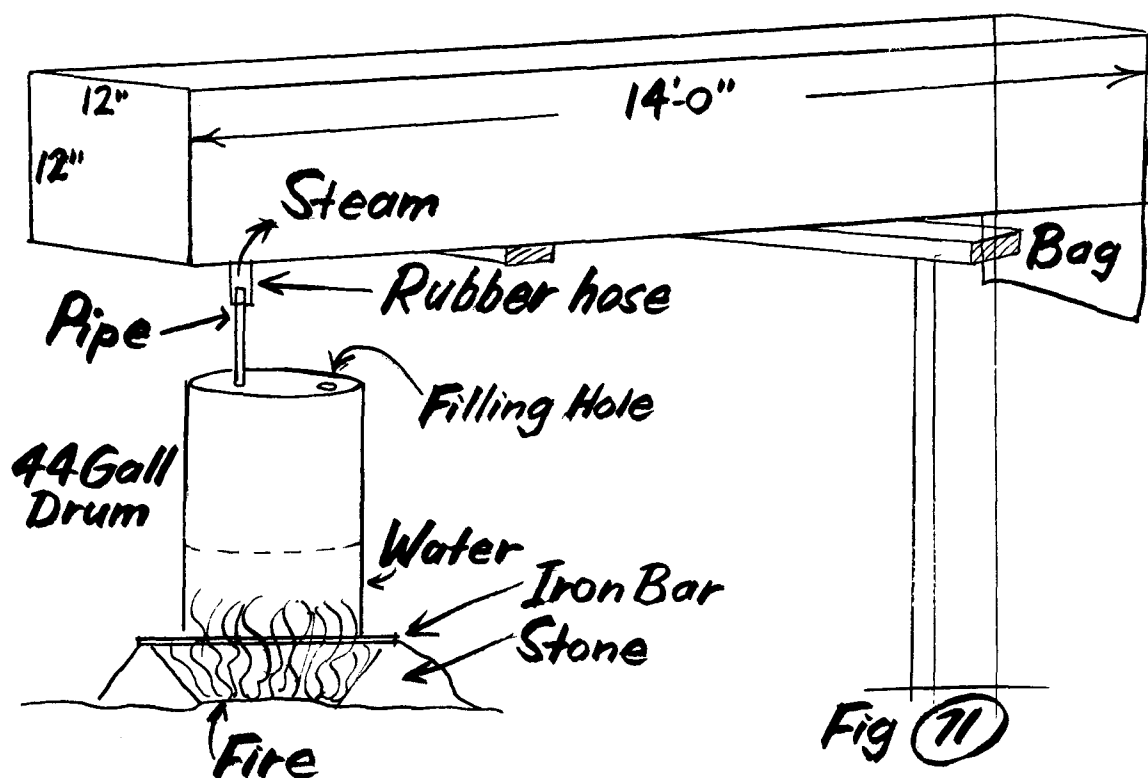
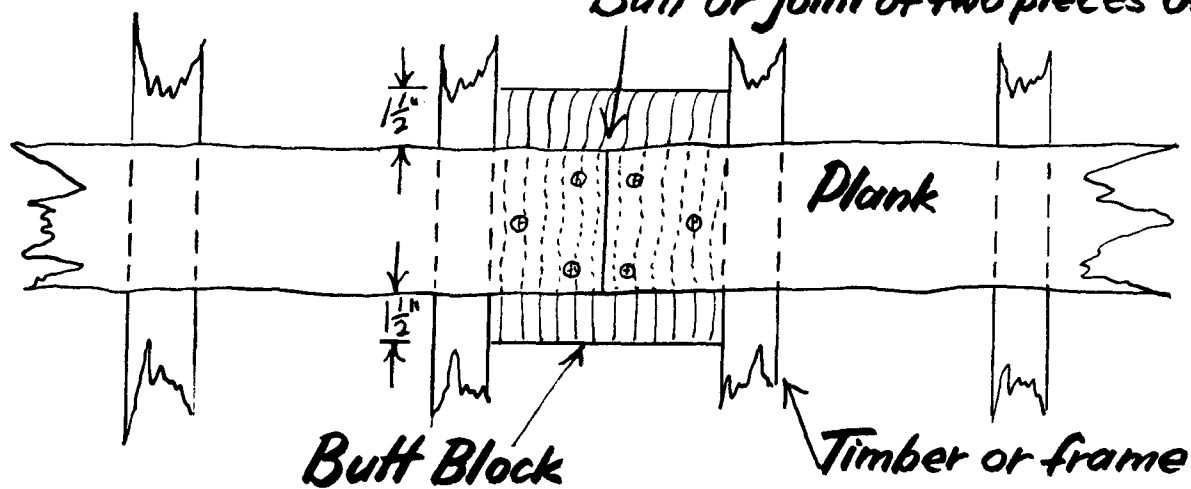


Fig (70)



**Fig (72)**

Butt or joint of two pieces of plank



**NOTE:** Butt block is tight fit between frames and it extends 1 1/2" over each edge of plank. the grain of butt block timber runs up and down.

Fig (73)

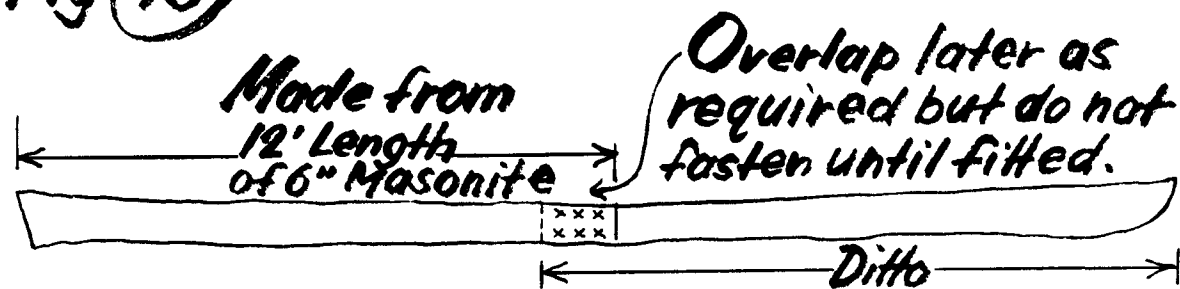


Fig (74)

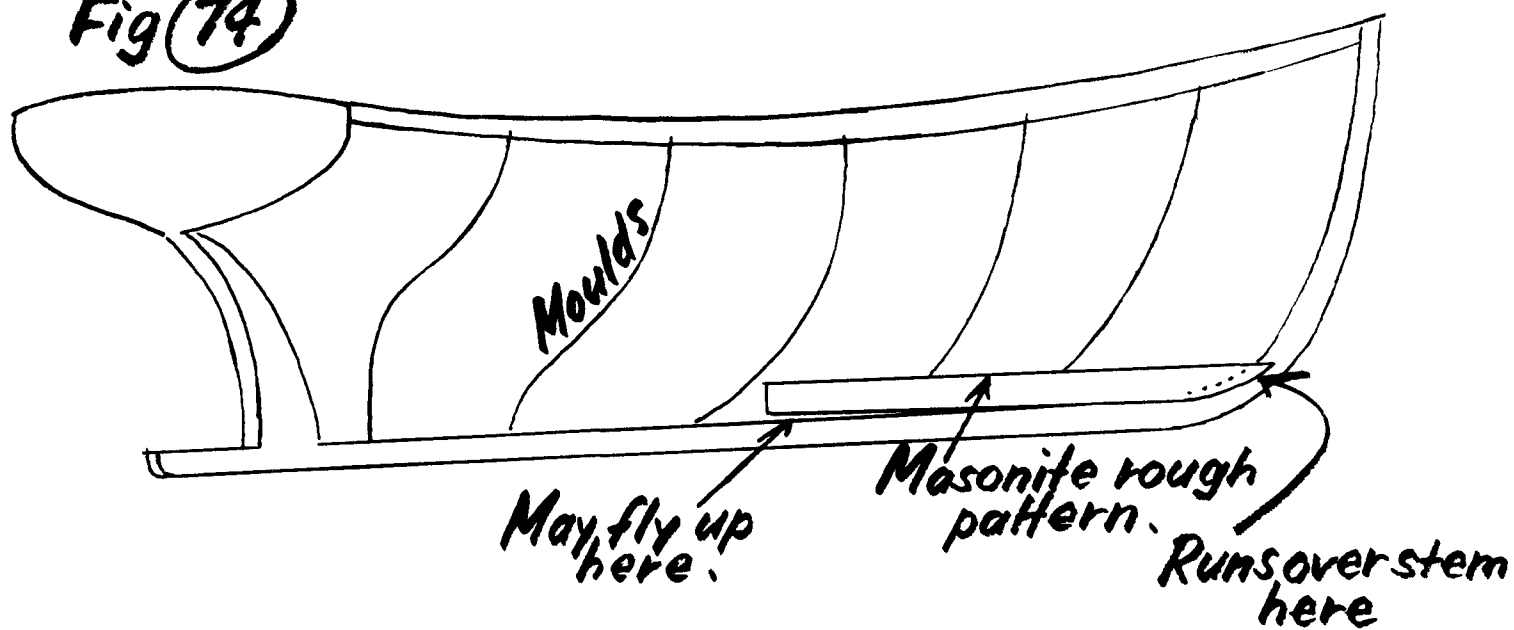
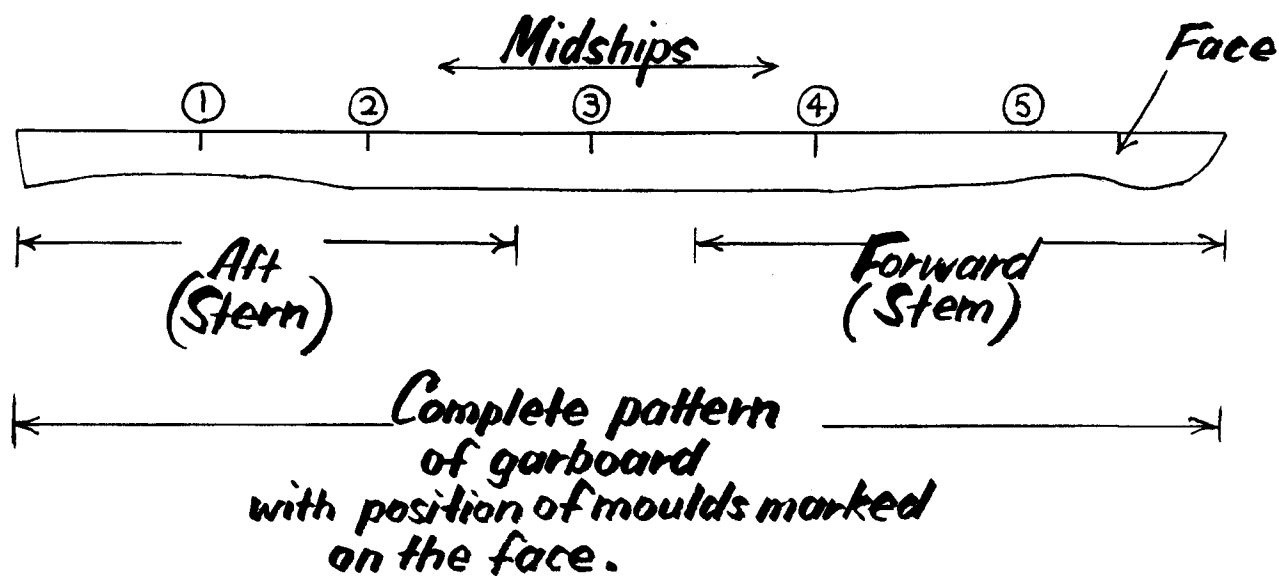


Fig (76)



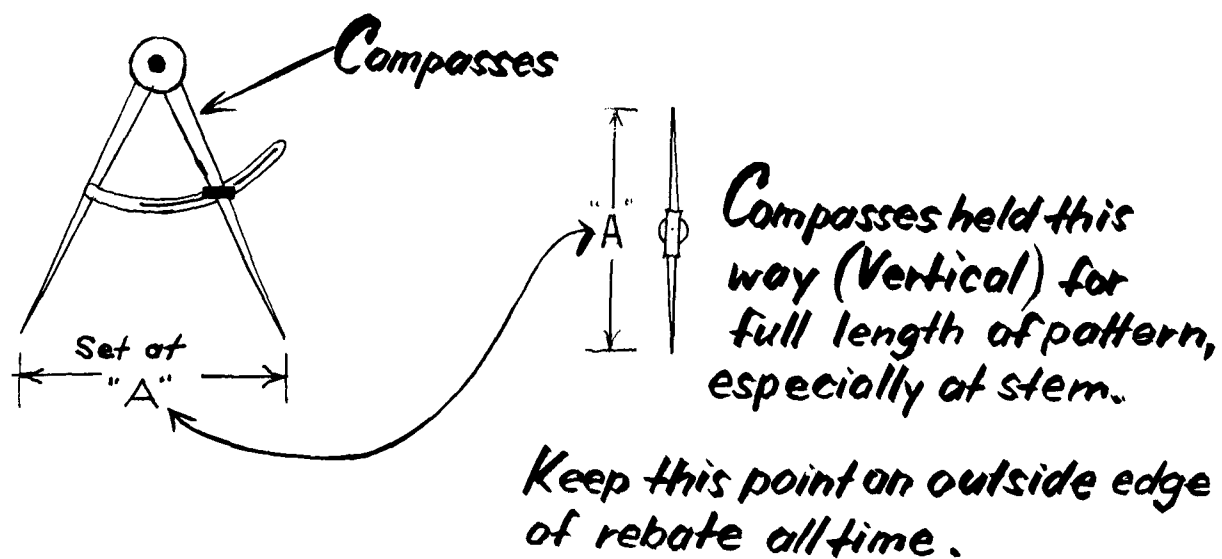
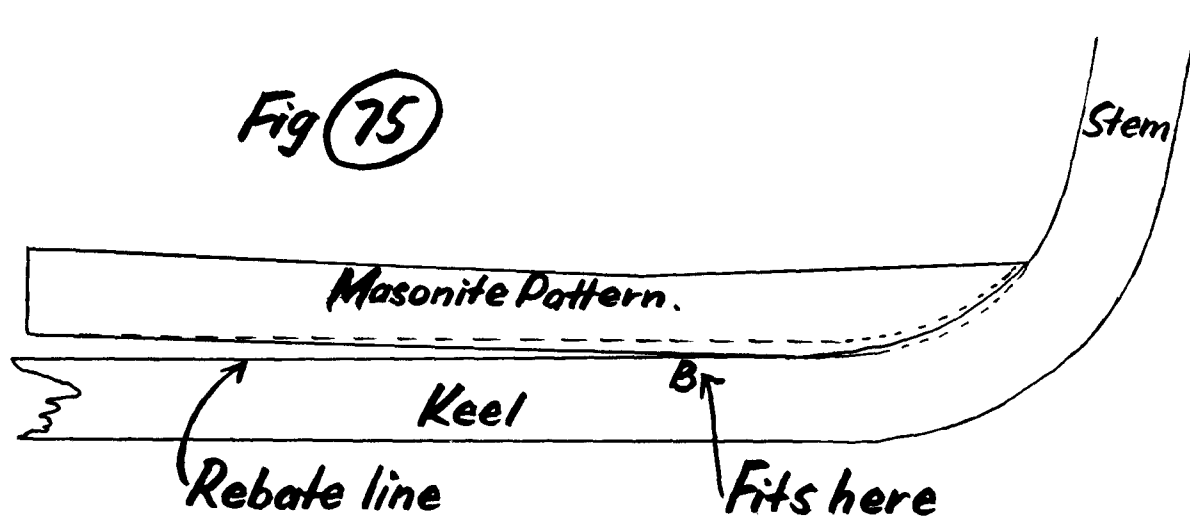
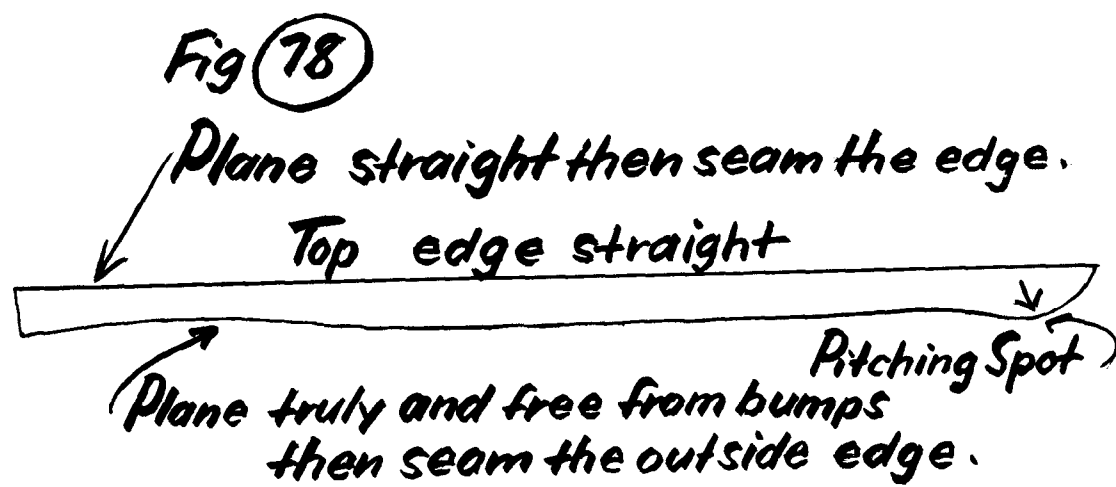
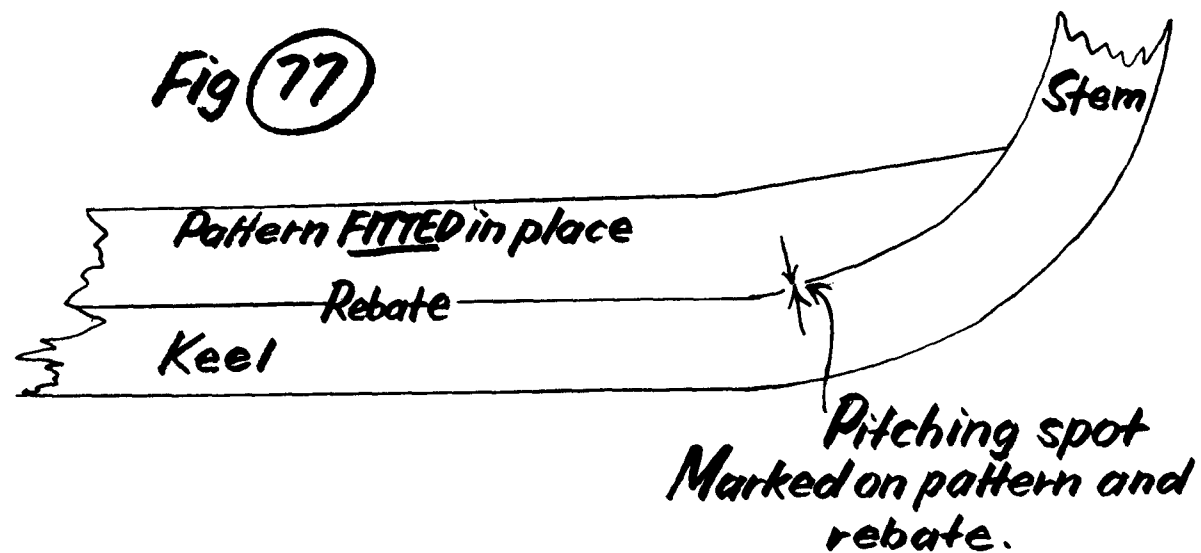


Fig (79)

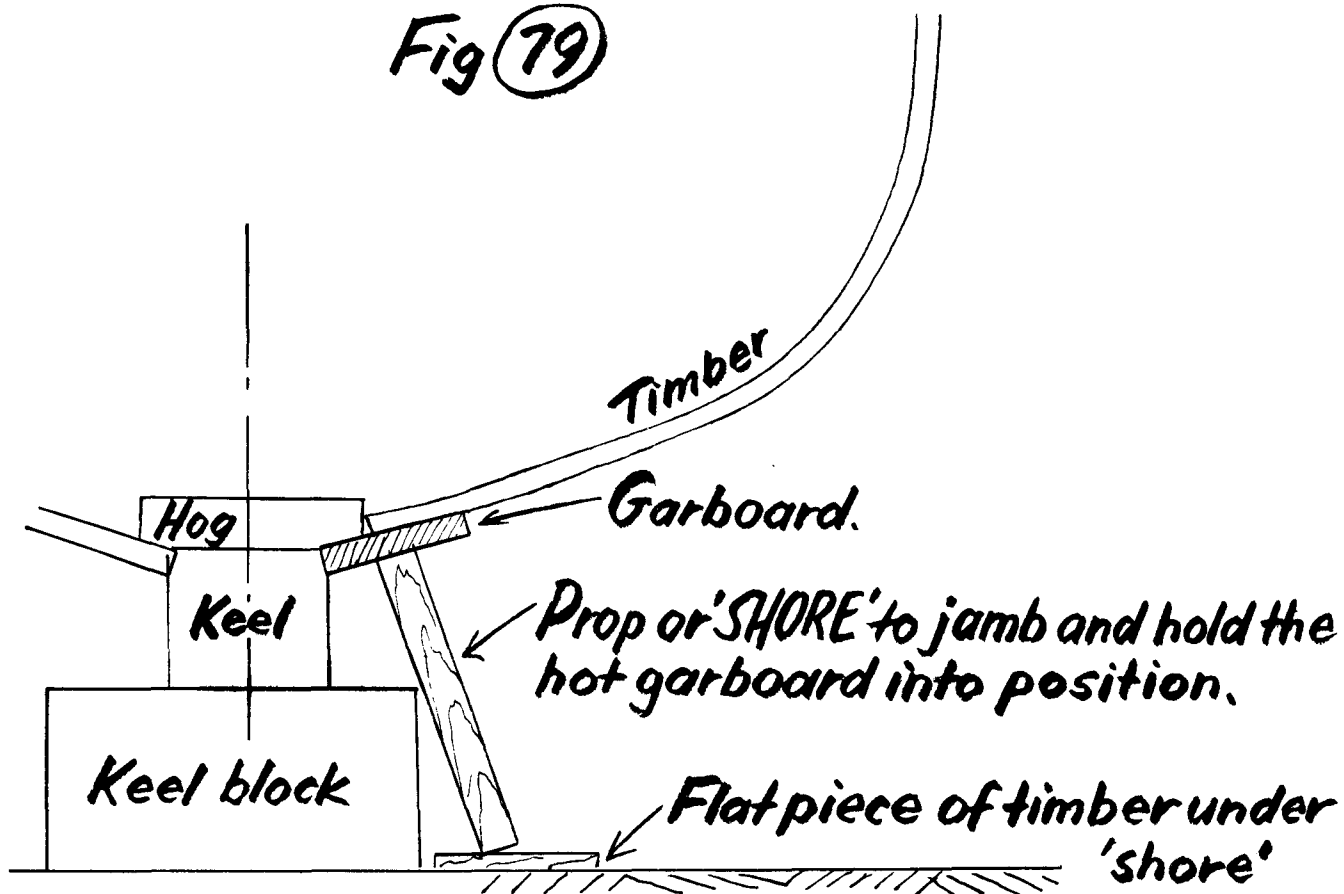


Fig (80)

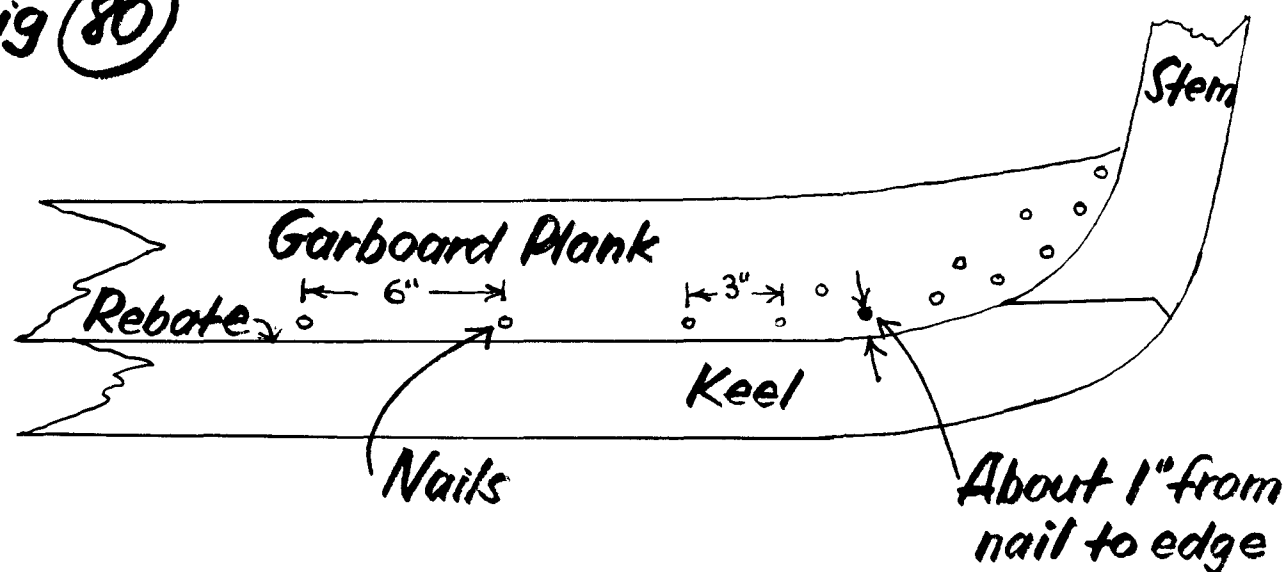


Fig (81)

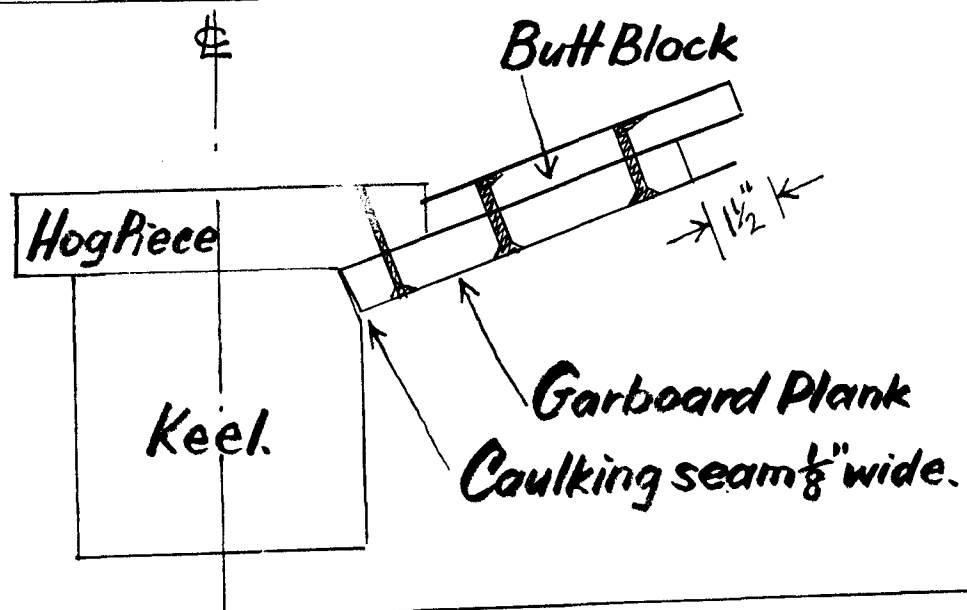


Fig (82)

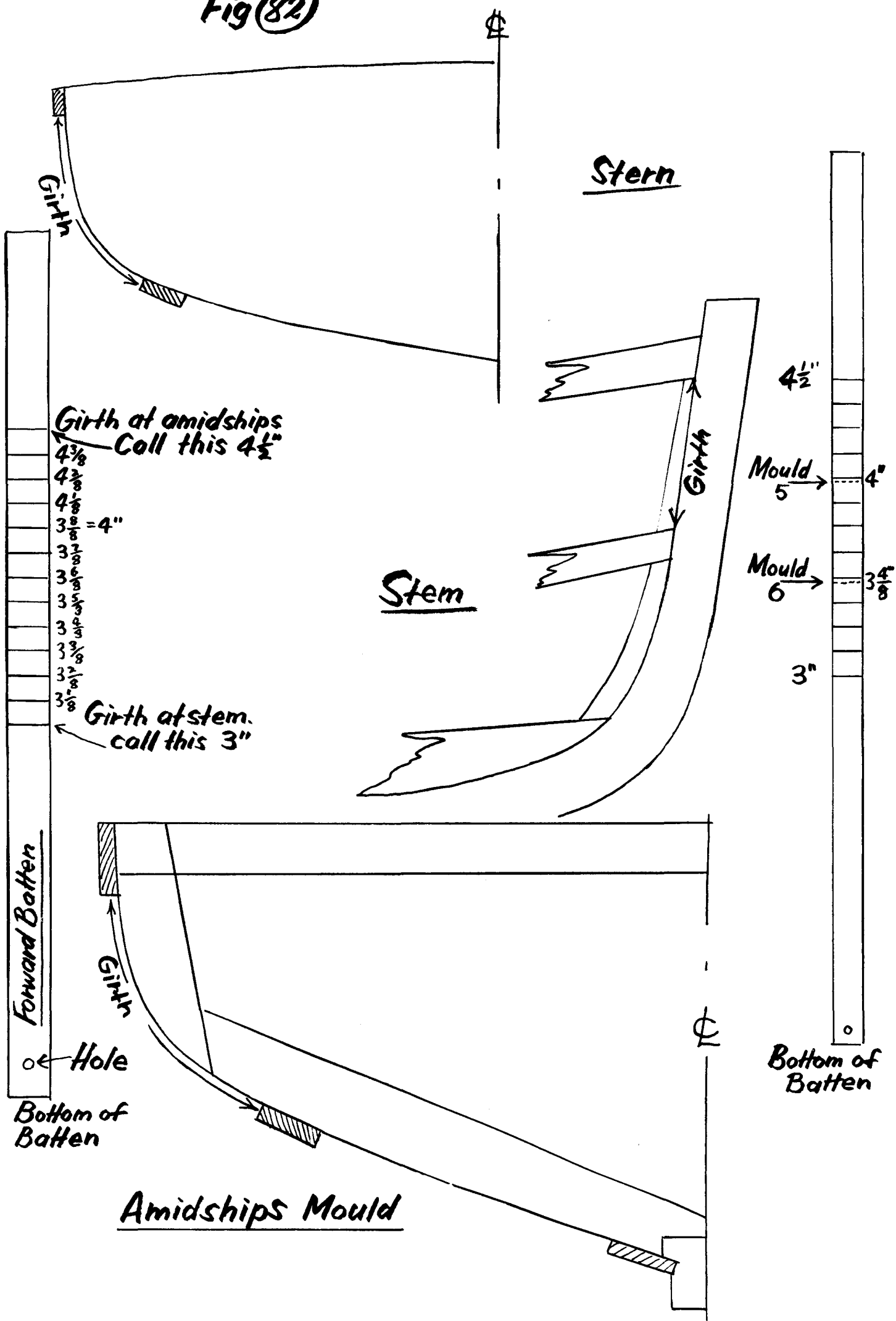


Fig (83)

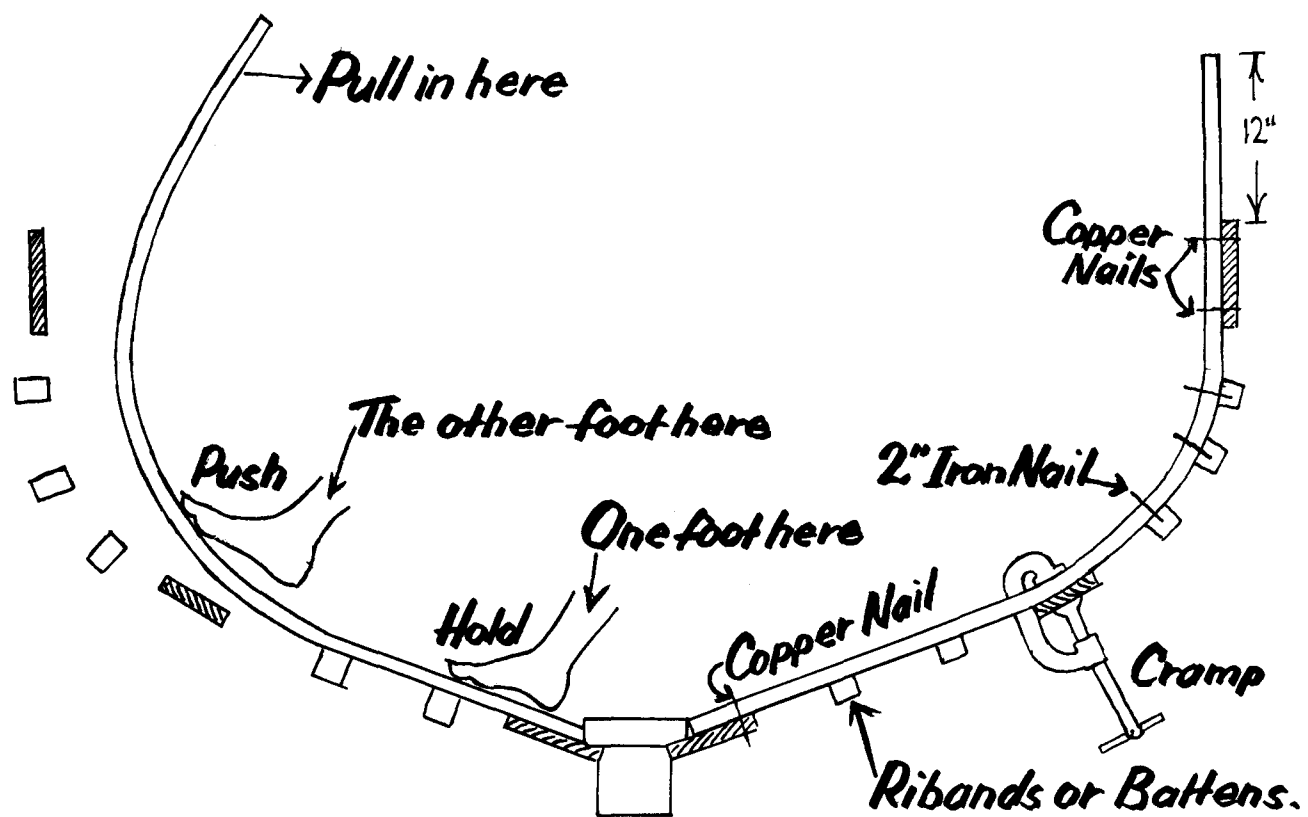
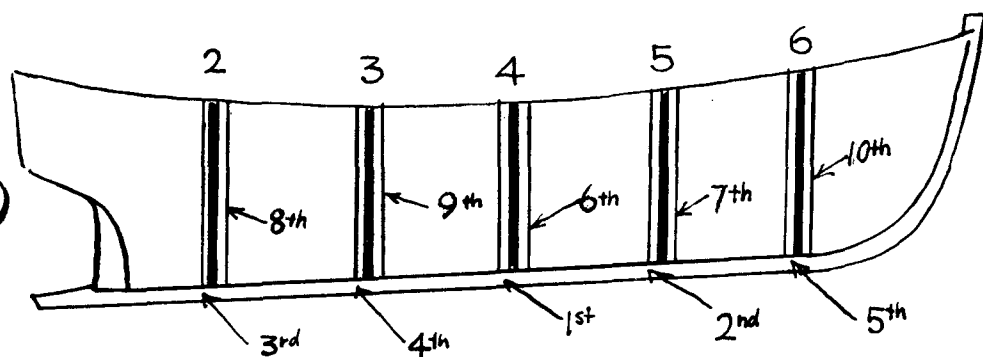


Fig (84)



Moulds shown heavy lines

Fig (85)

A bent frame or timber about  
moulds N<sup>o</sup> 2 to N<sup>o</sup> 3

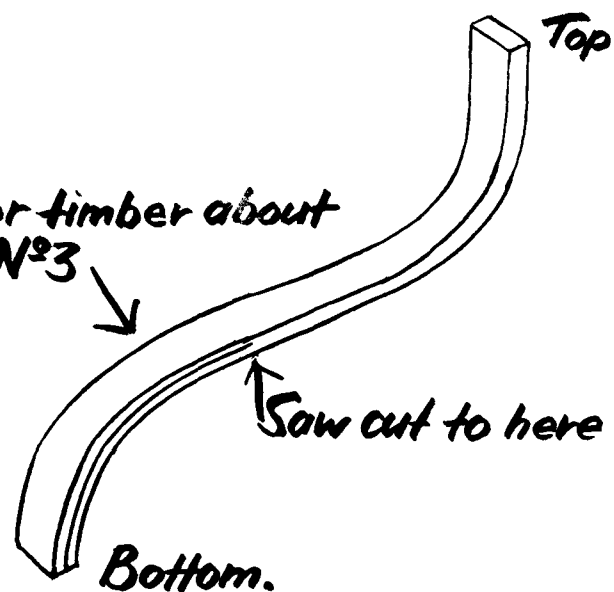




Fig (86)

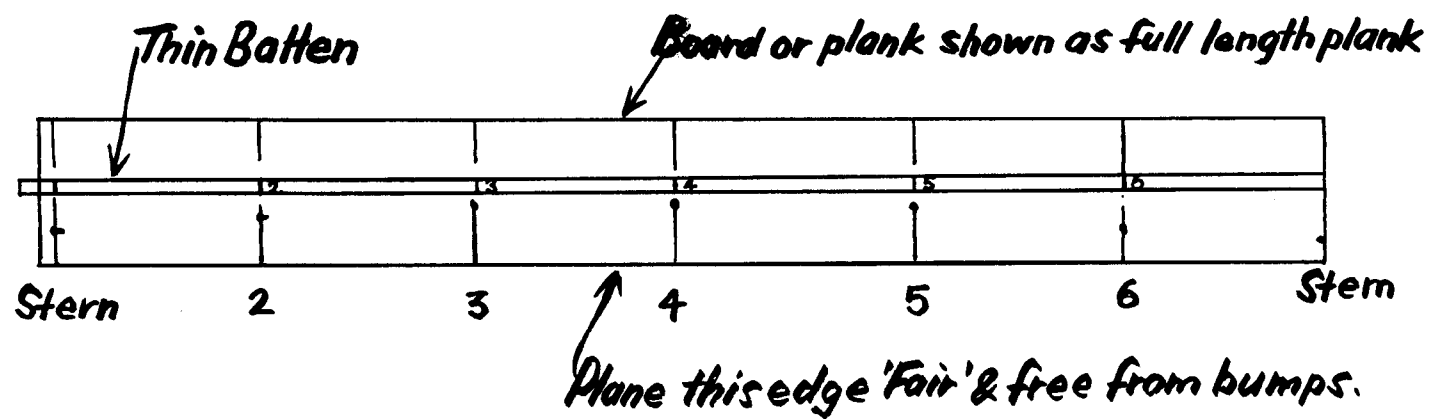


Fig (87)

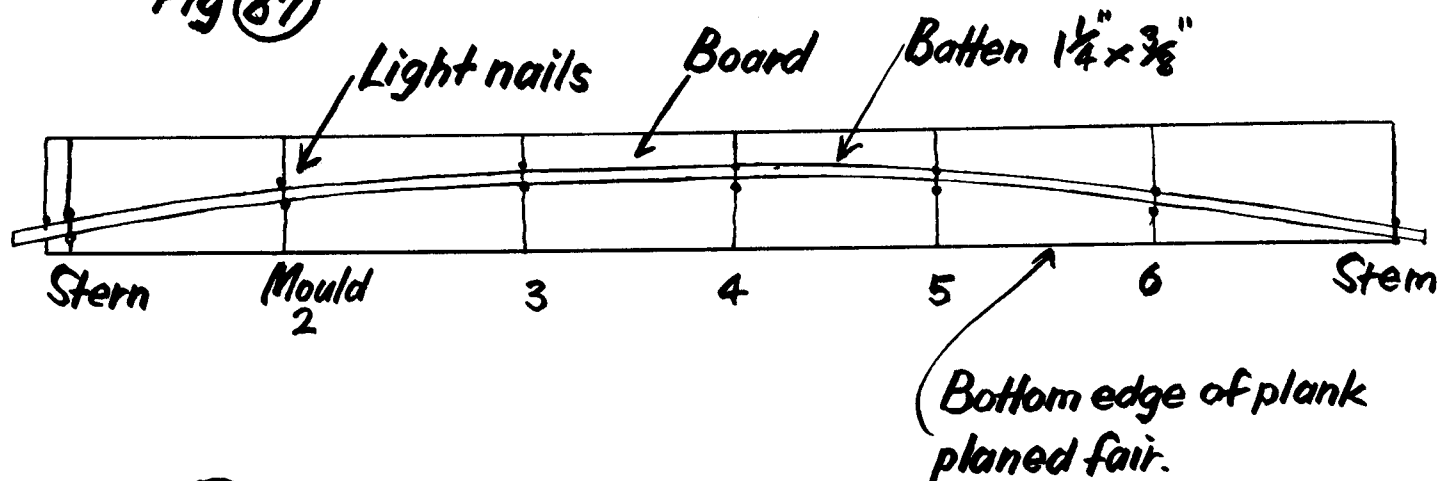
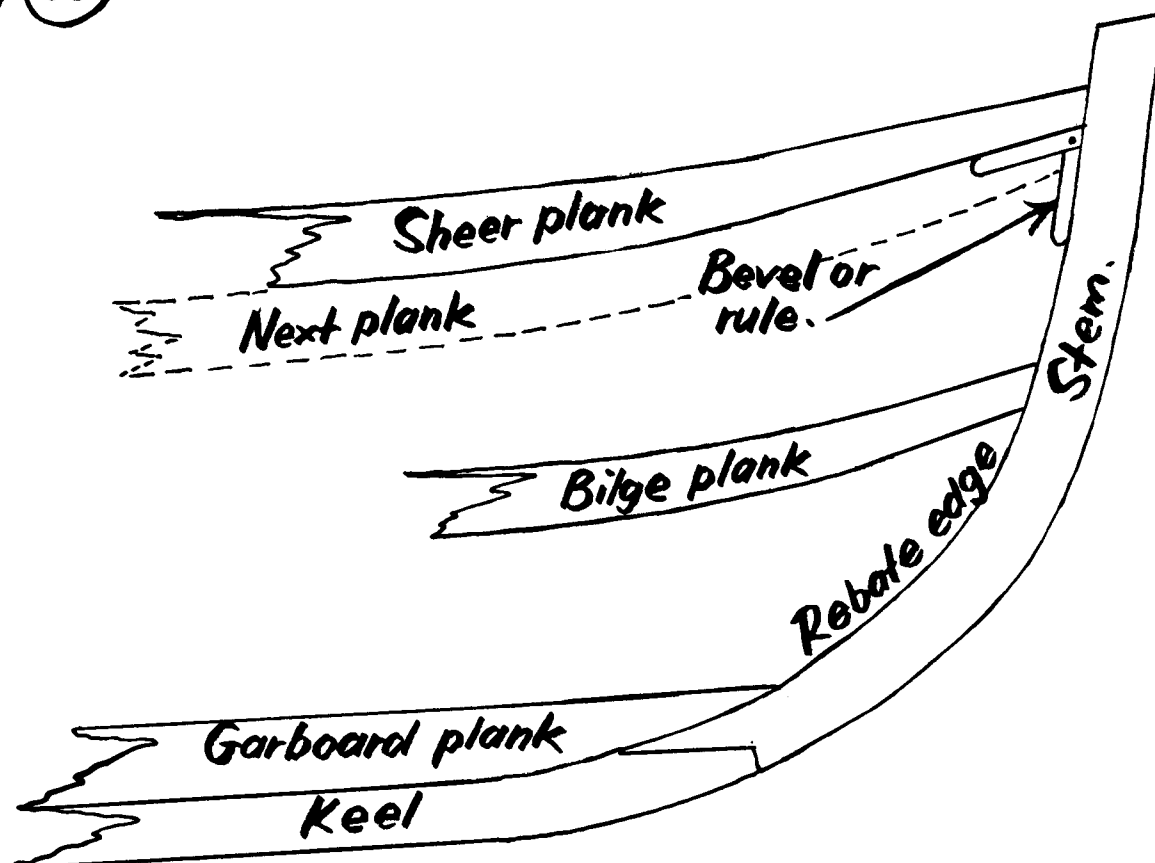
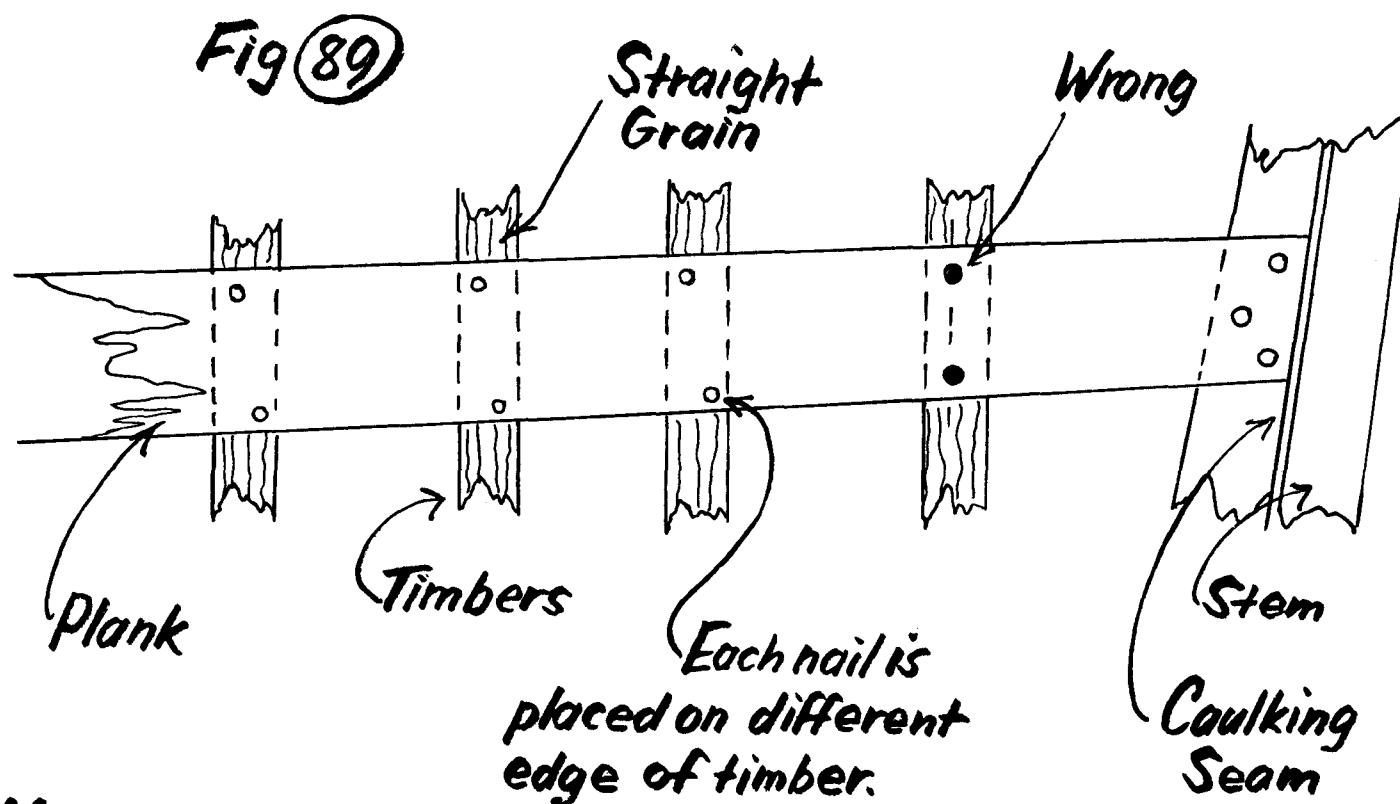


Fig (88)





Note: All nails are 'Staggered' (AS DRAWN) so that the timbers do not split from one nail to another as would be the case if the nails were all in the same line of grain.

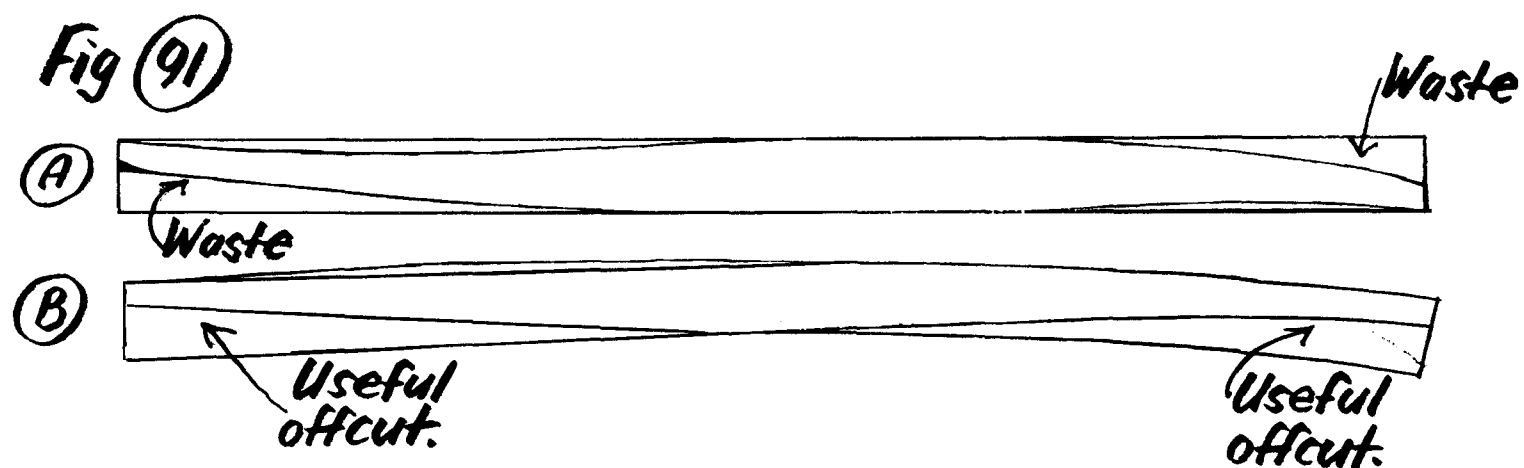
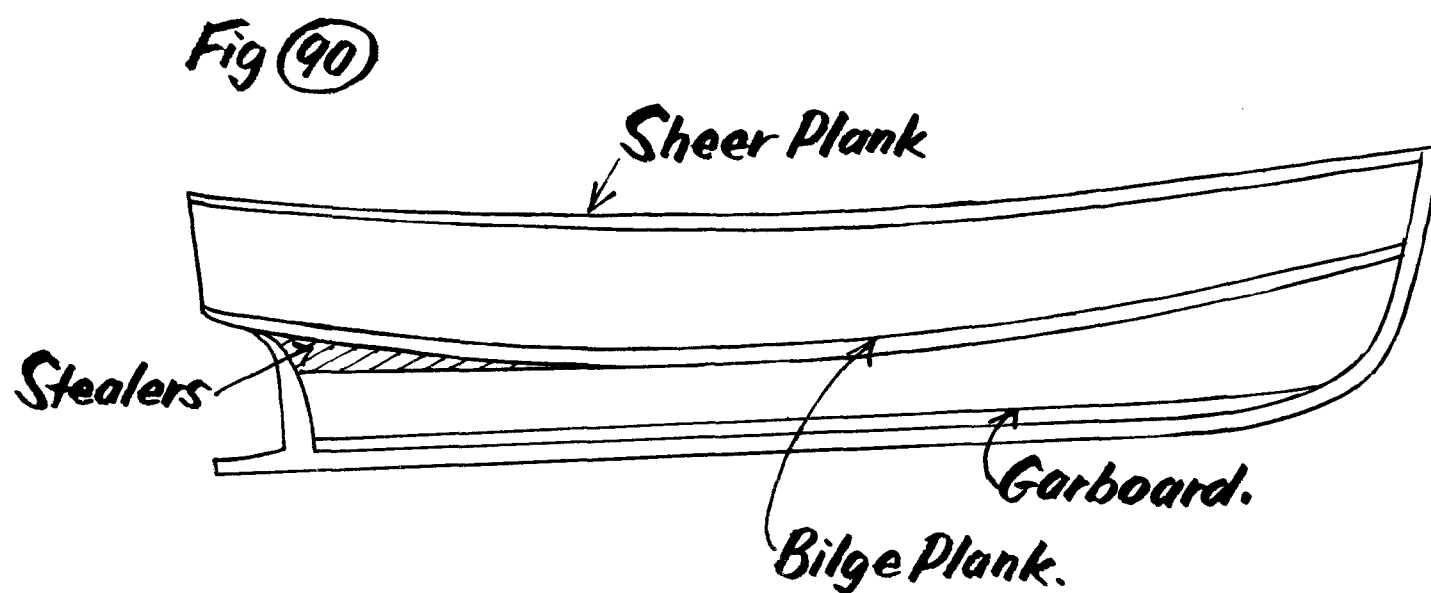


Fig (92)

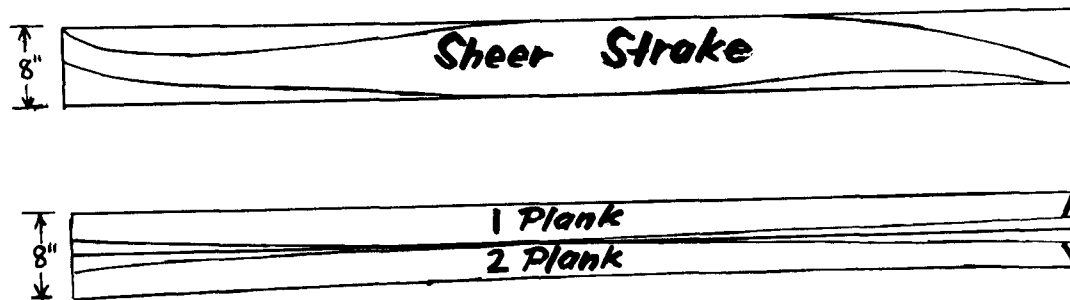


Fig (93)

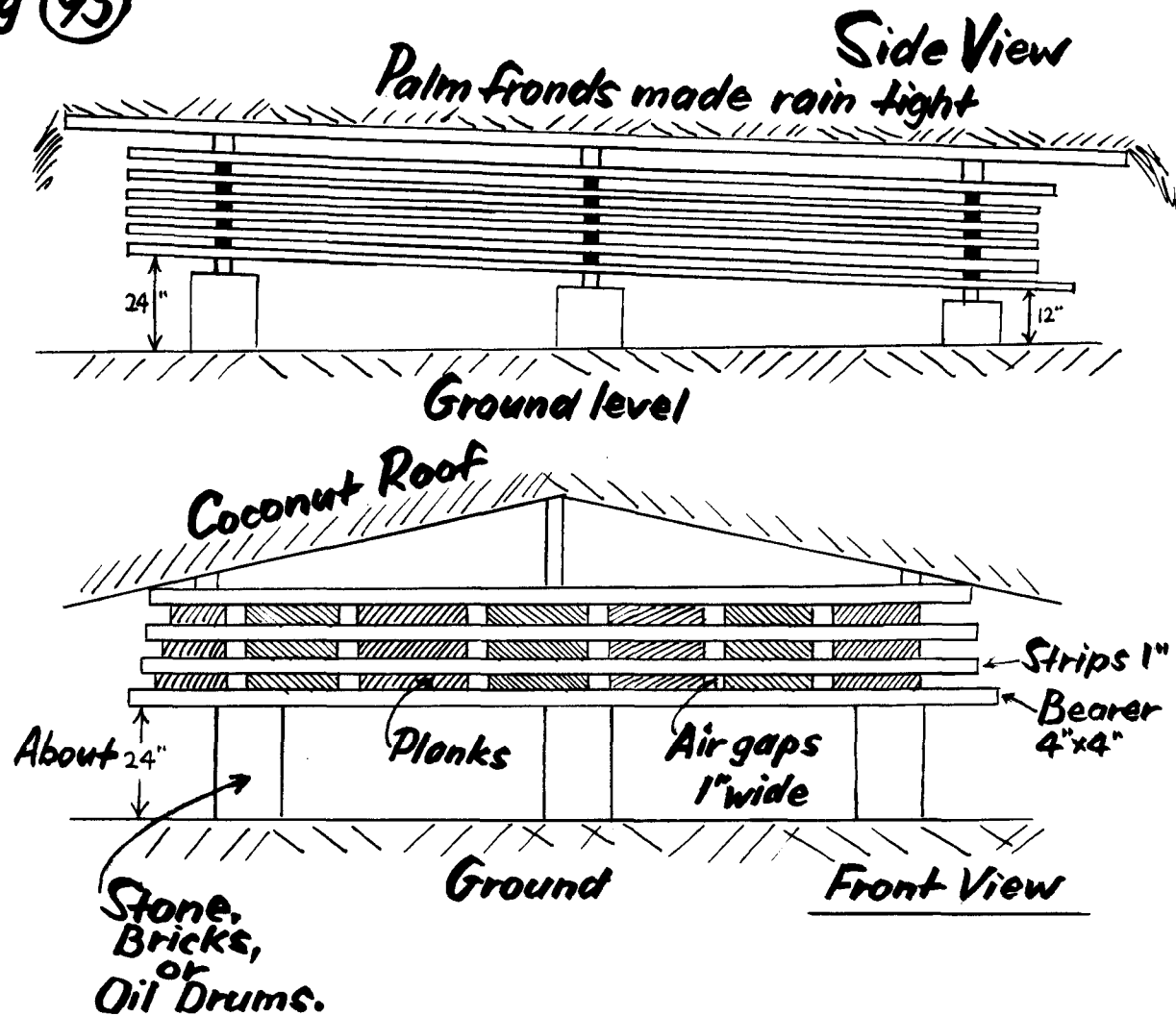
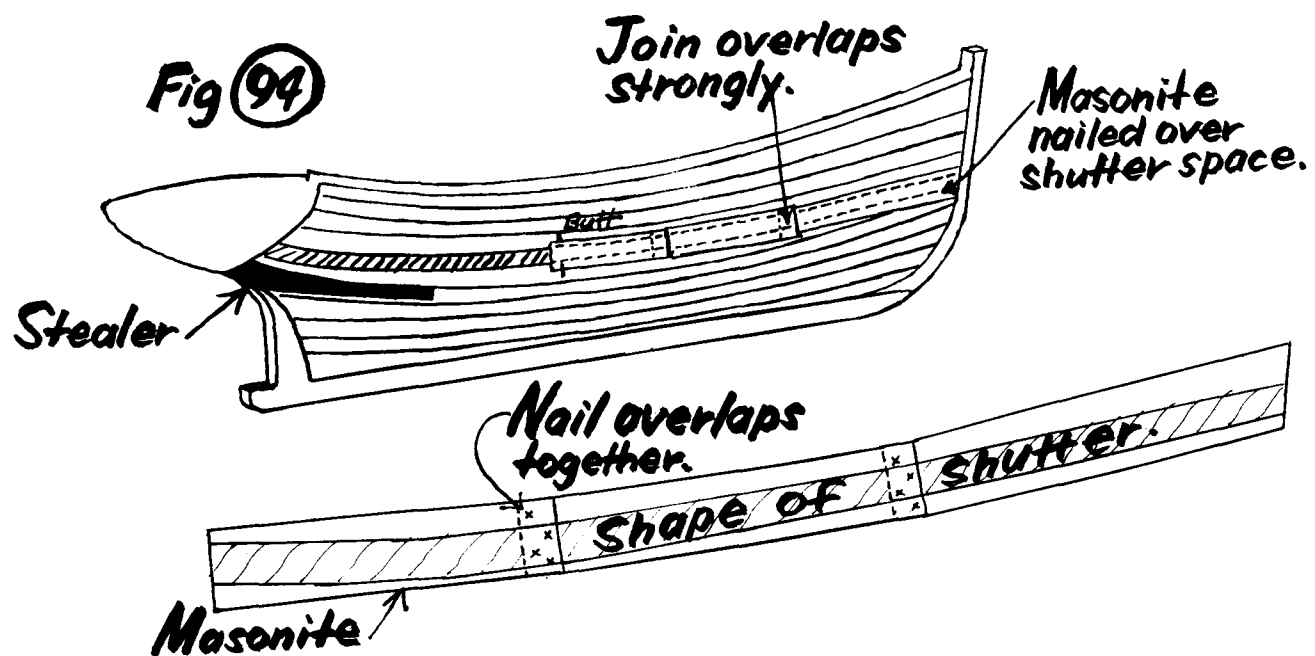


Fig (94)



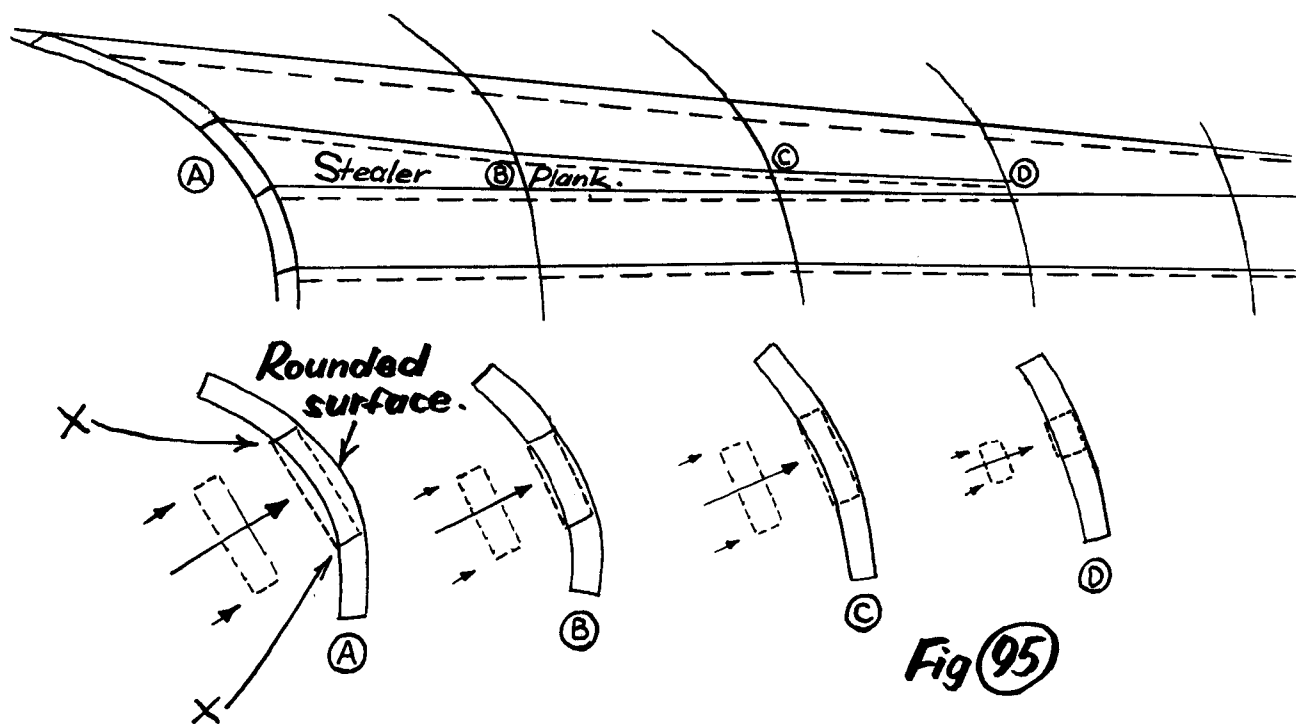


Fig (95)

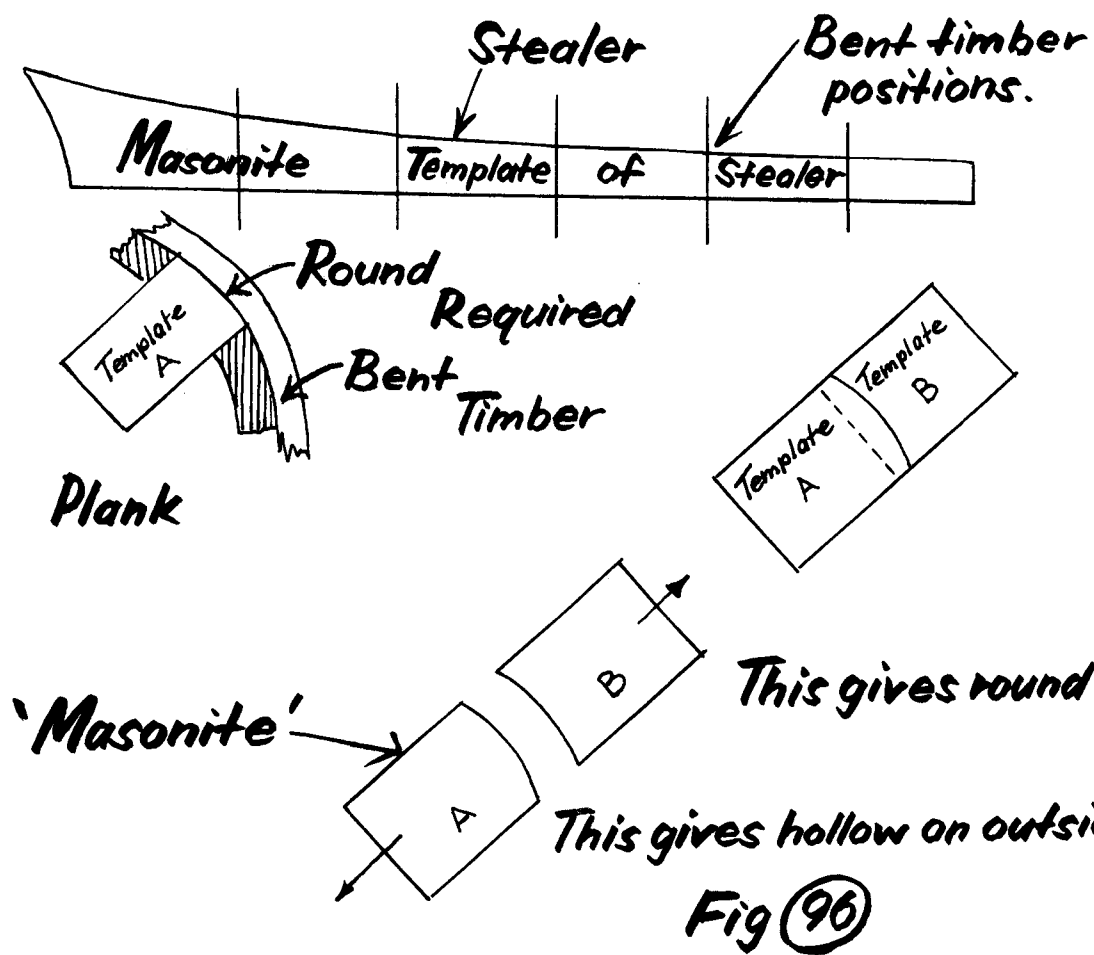


Fig (96)

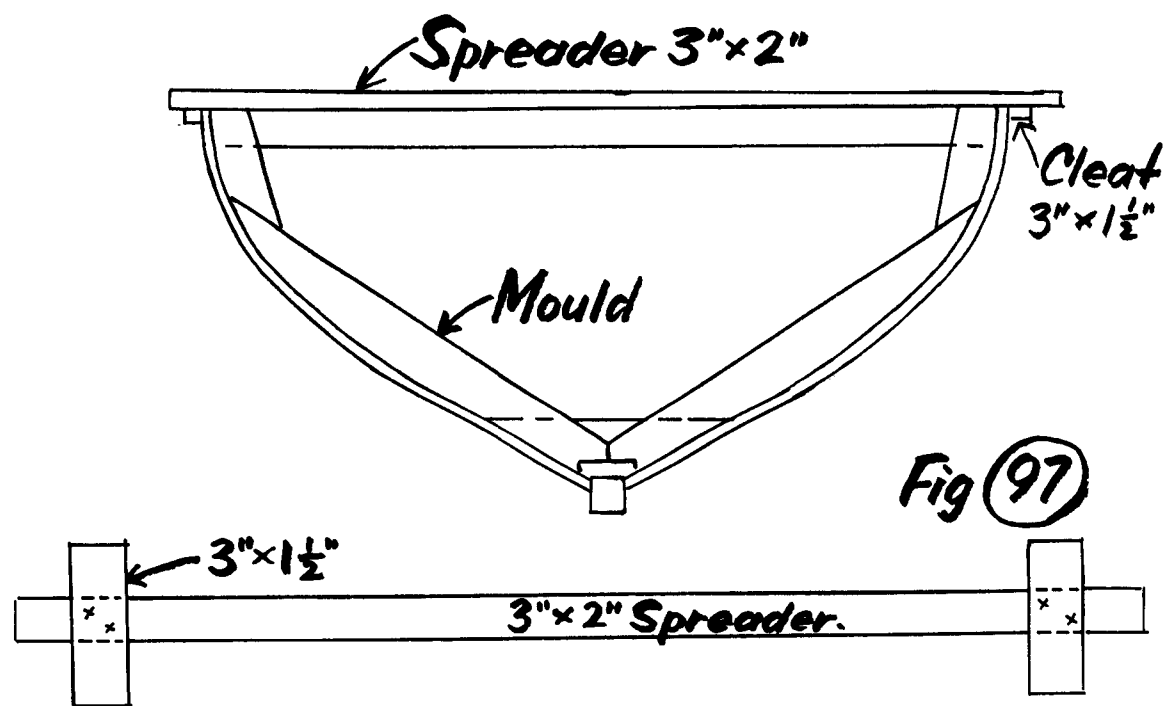


Fig (97)

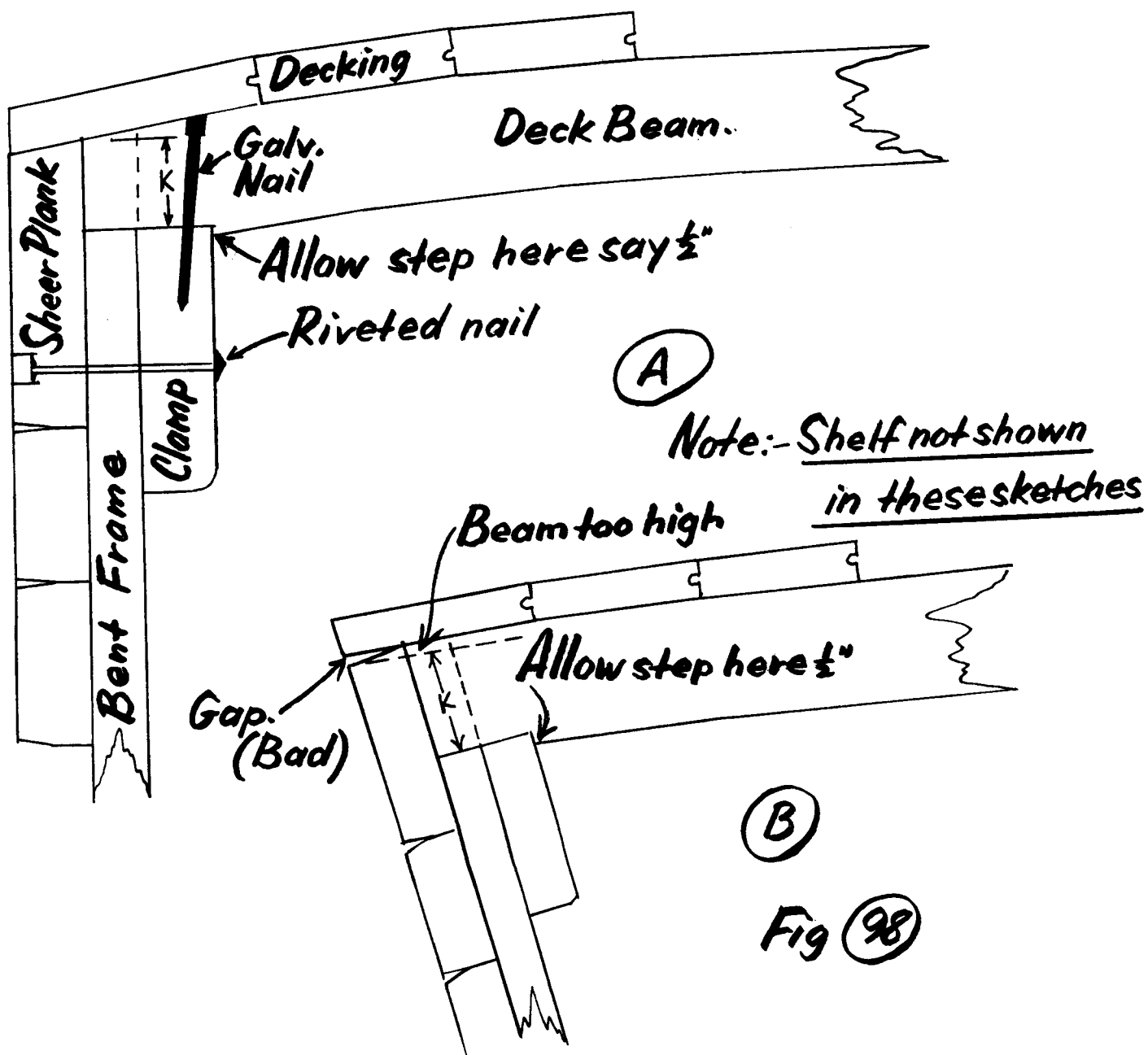
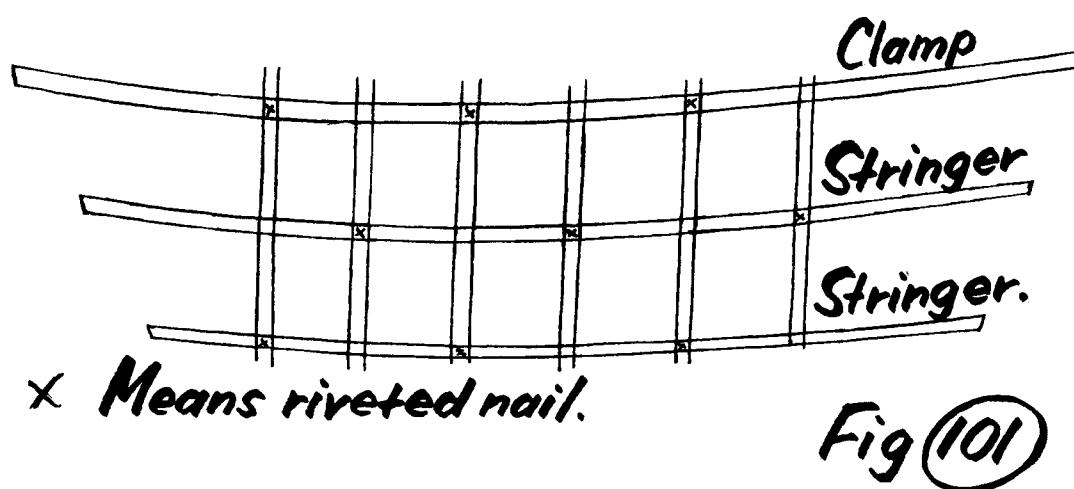
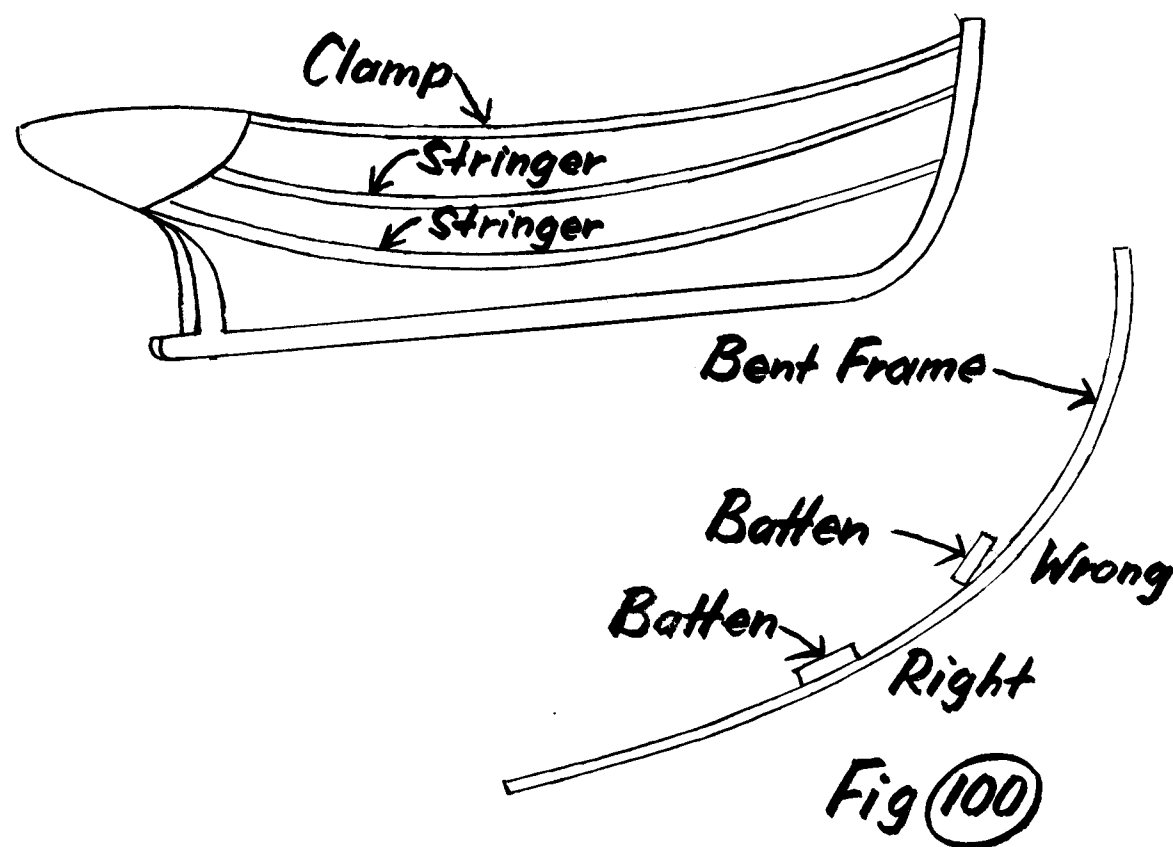
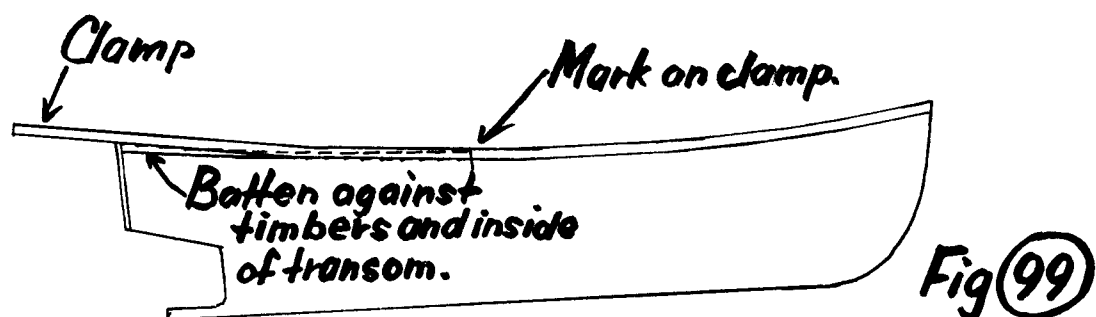
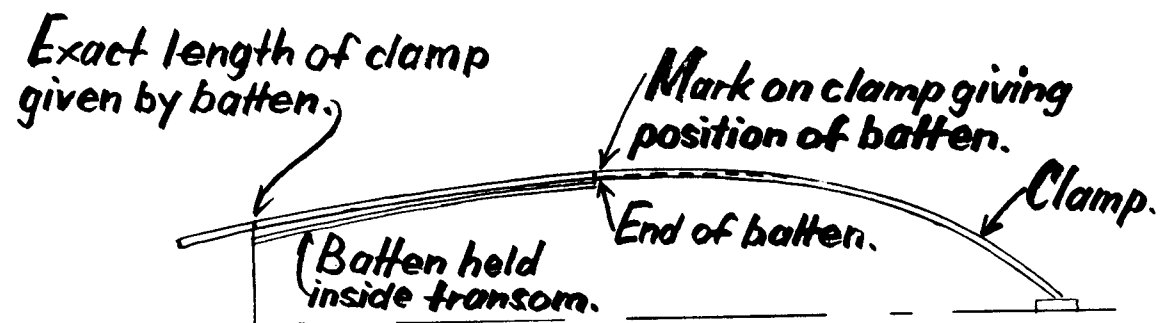
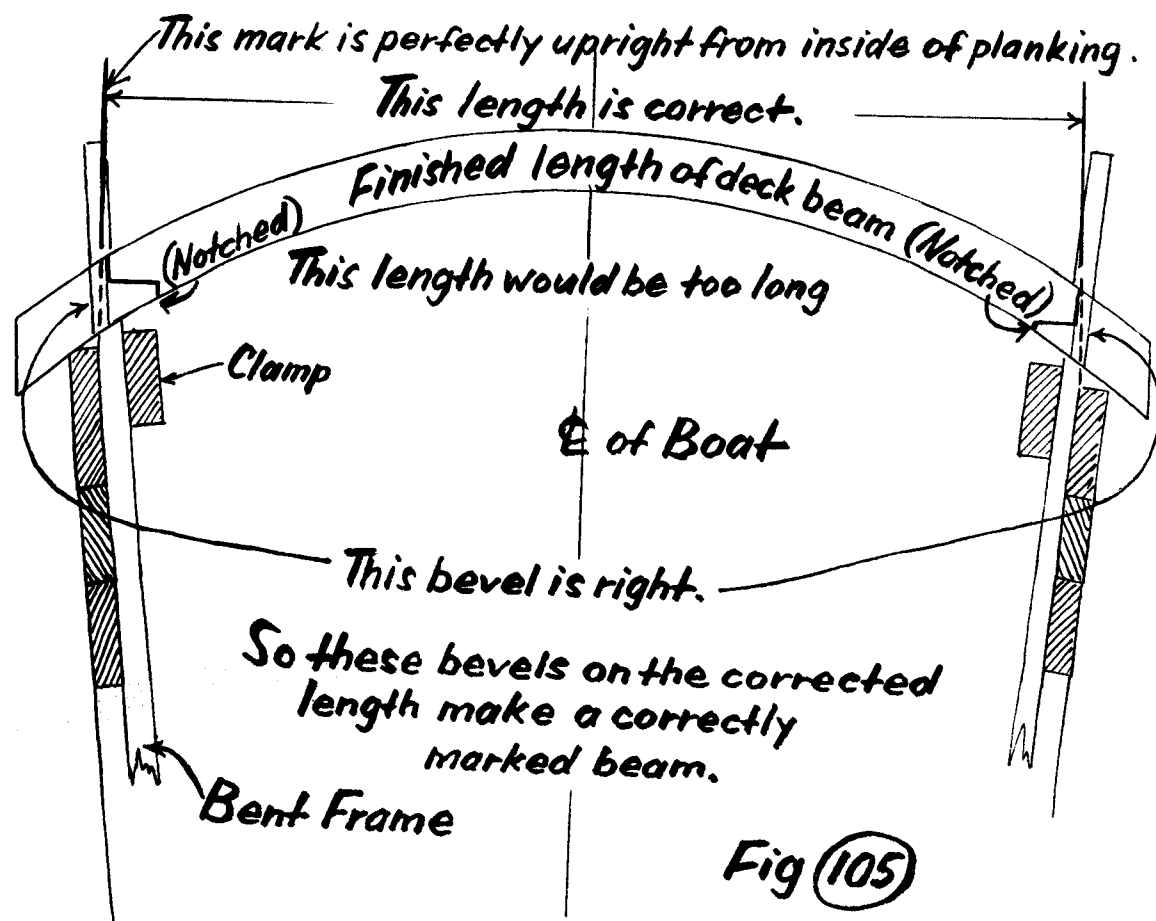


Fig (98)







X shows position of hanging knees

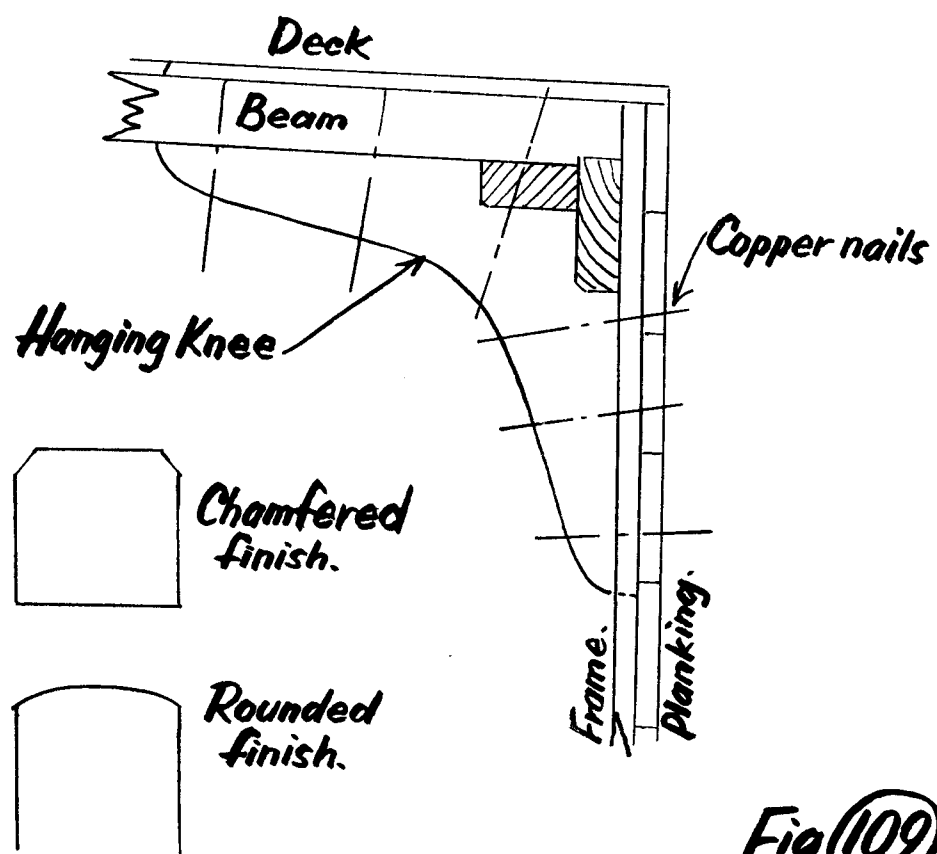
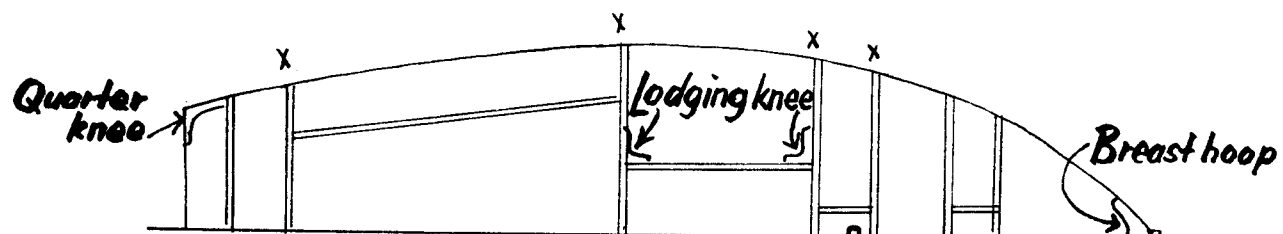


Fig (109)



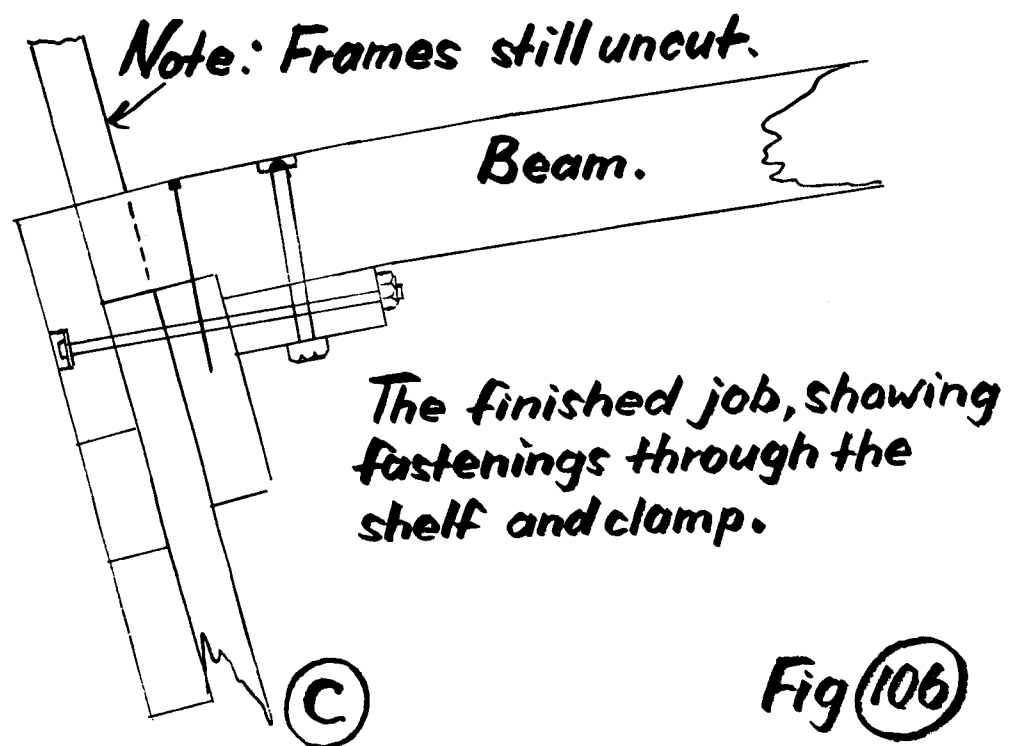
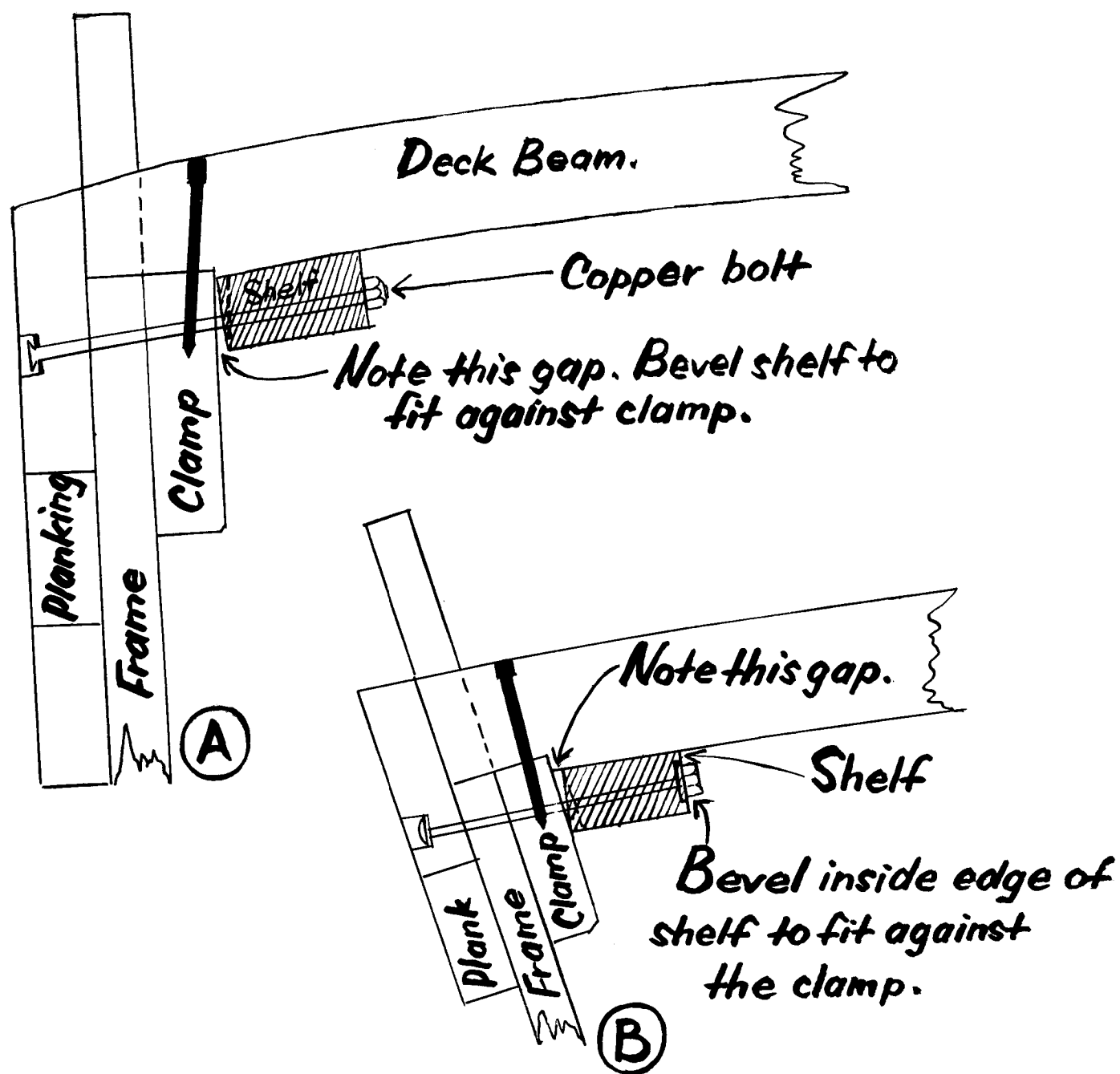
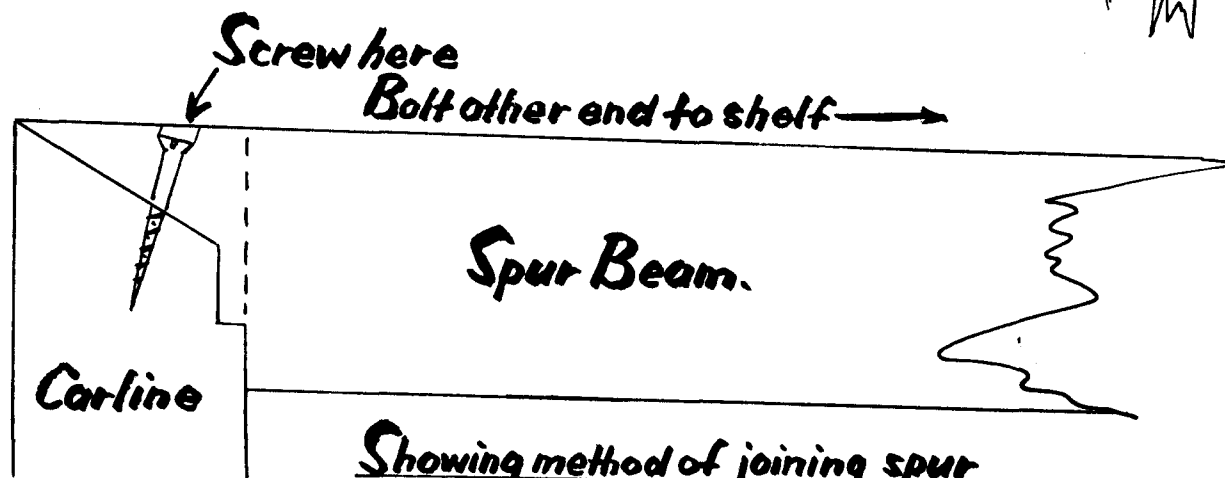
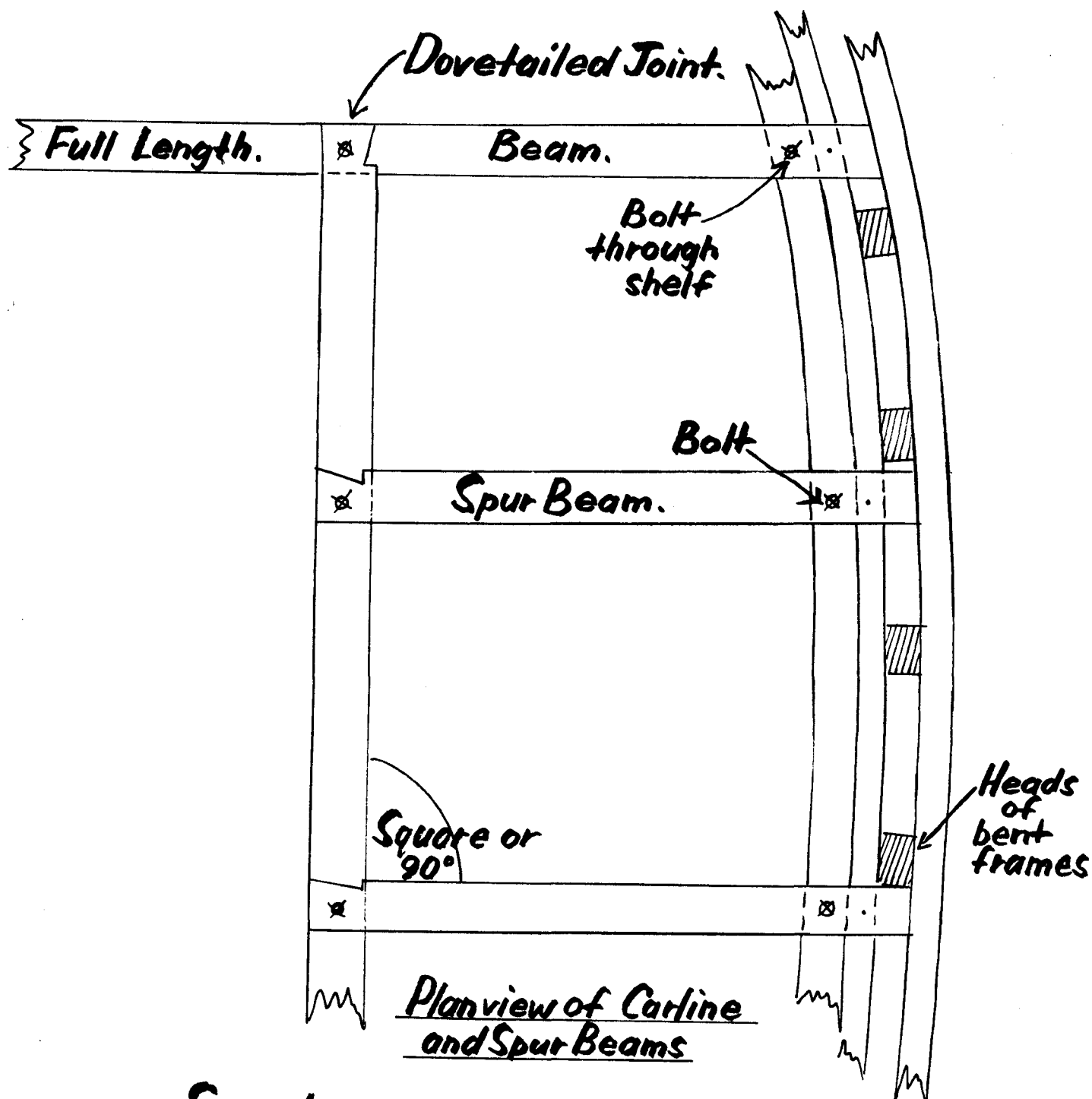
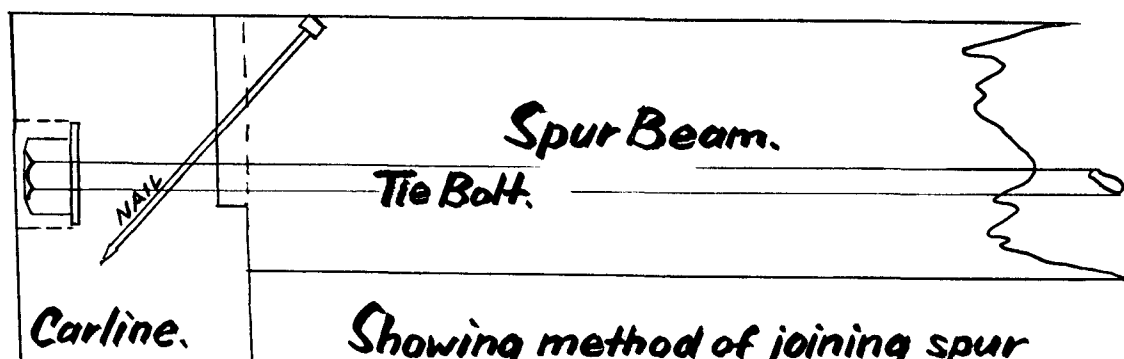
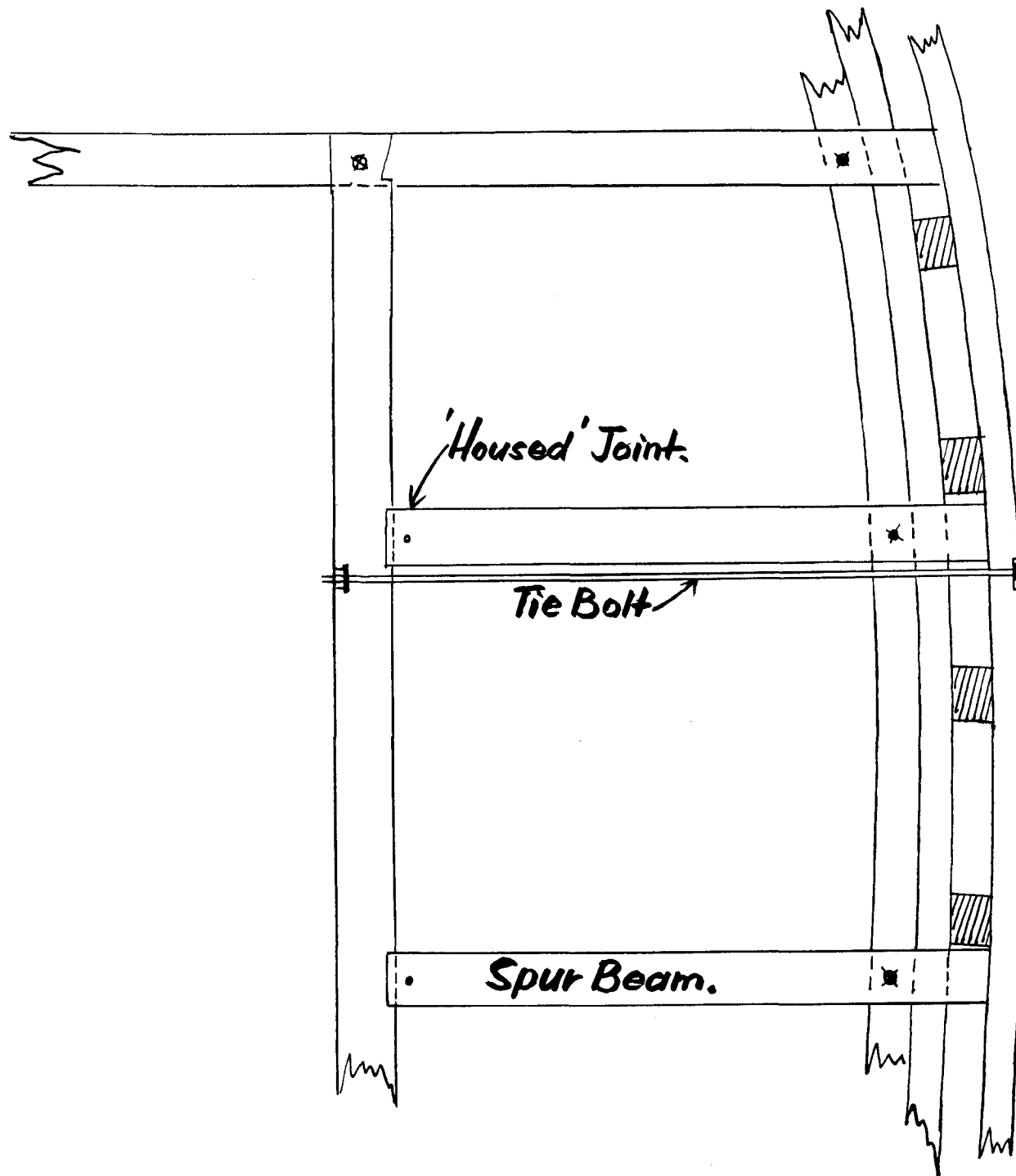


Fig (106)



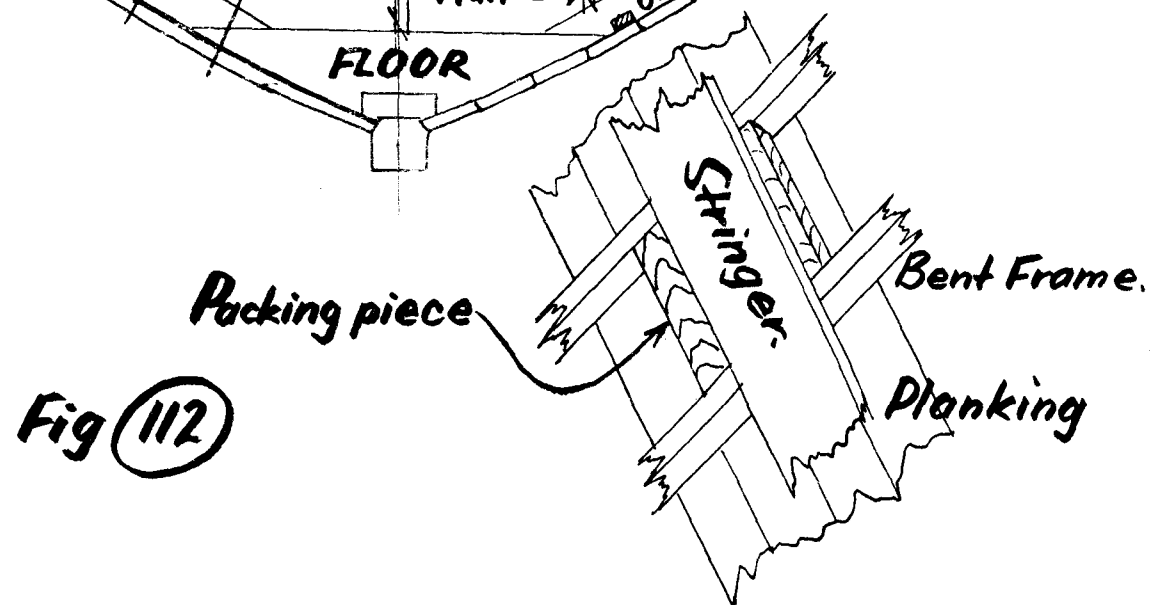
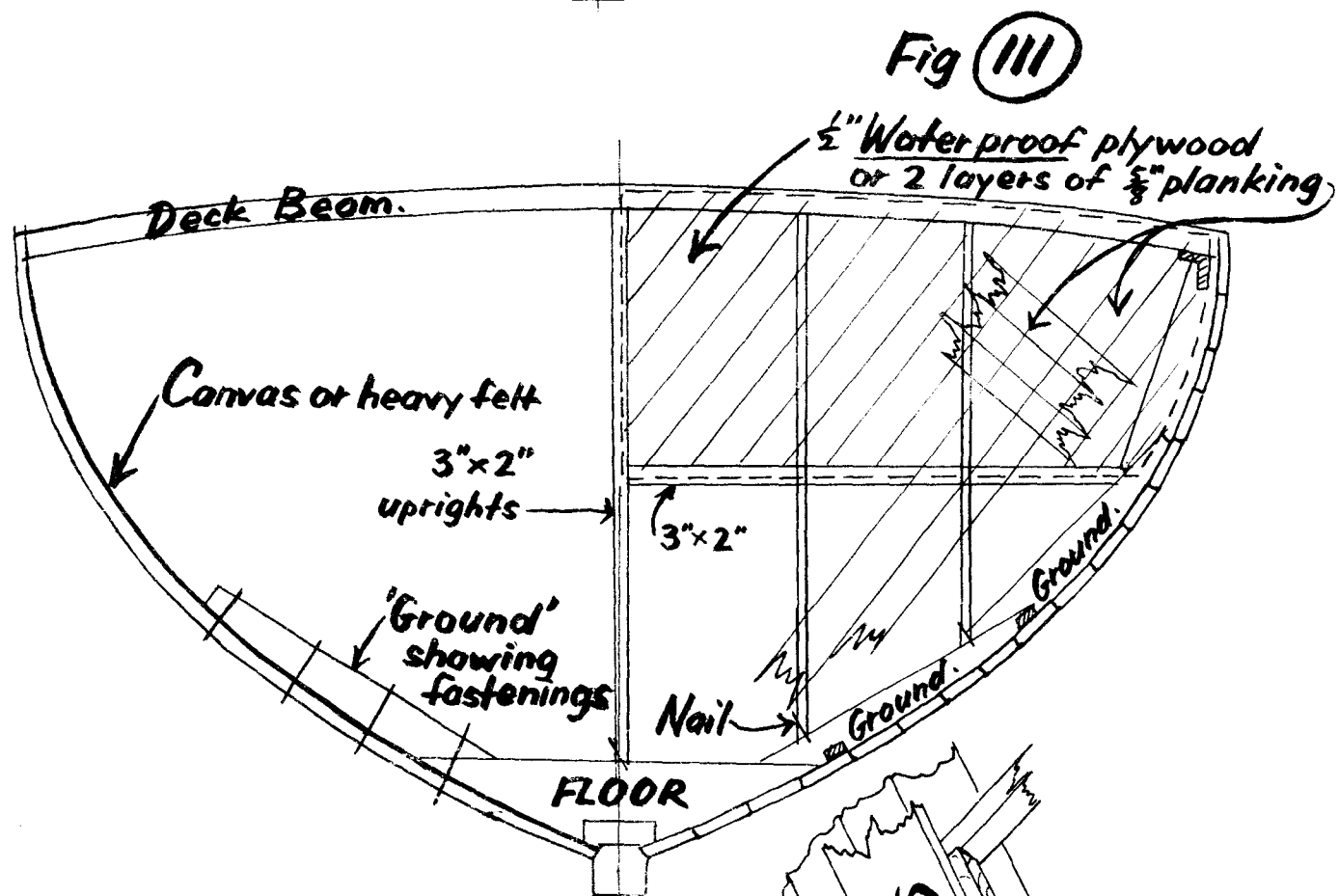
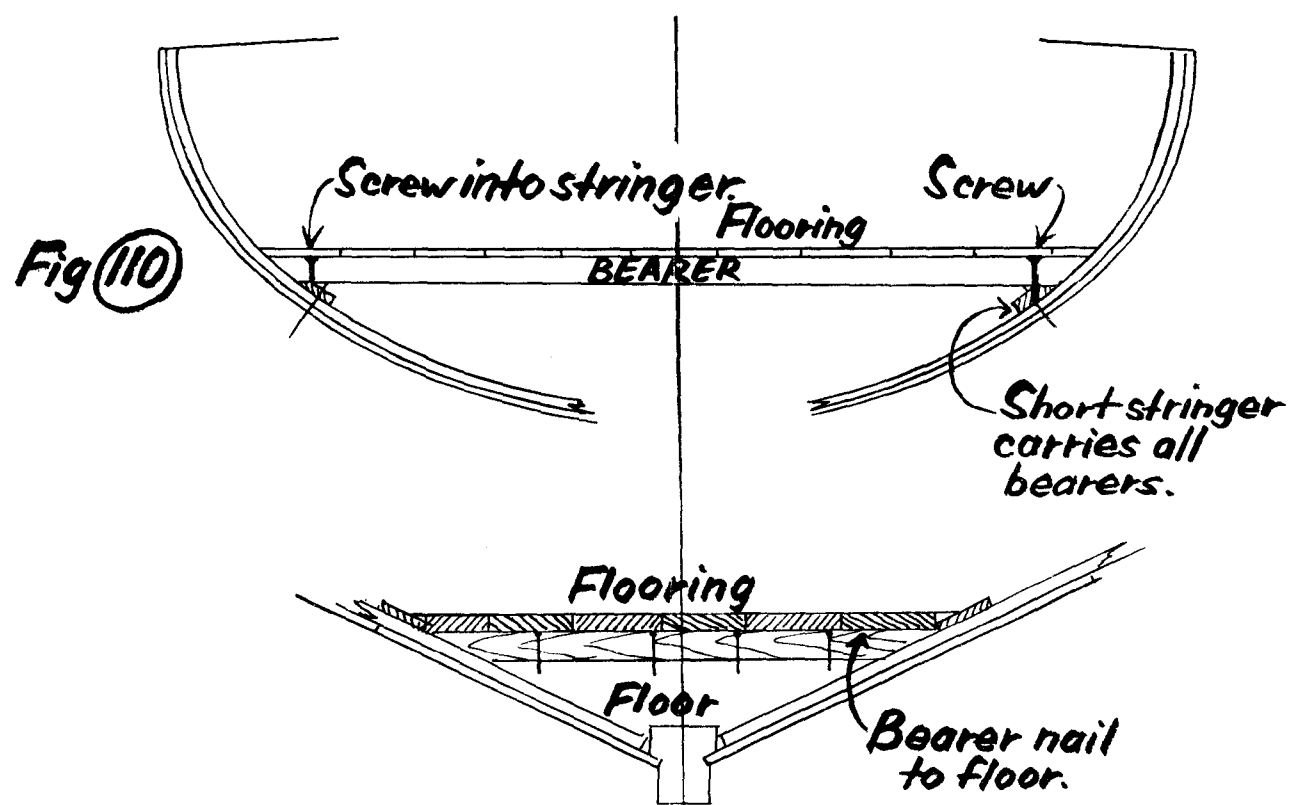
Showing method of joining spur beam to carline with a stepped dovetailed joint.  
 This same method should always be used to join the carline to the main beams.

Fig (107)



Showing method of joining spur beam to carline with a stepped 'Housed' joint.  
Note Tie bolt. These should be spaced about 2'-0" apart.

Fig (108)



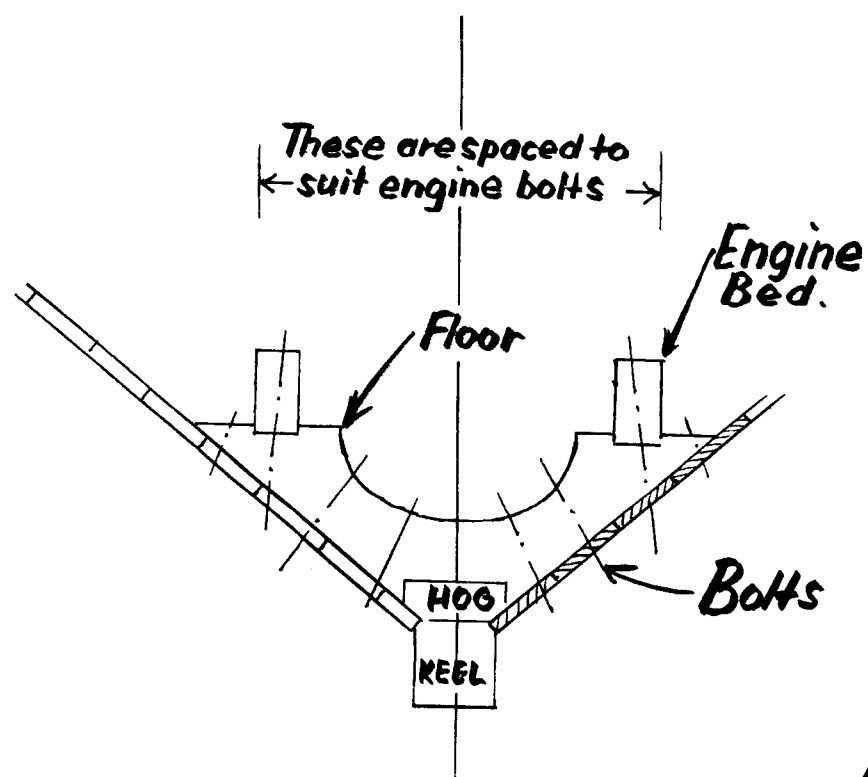
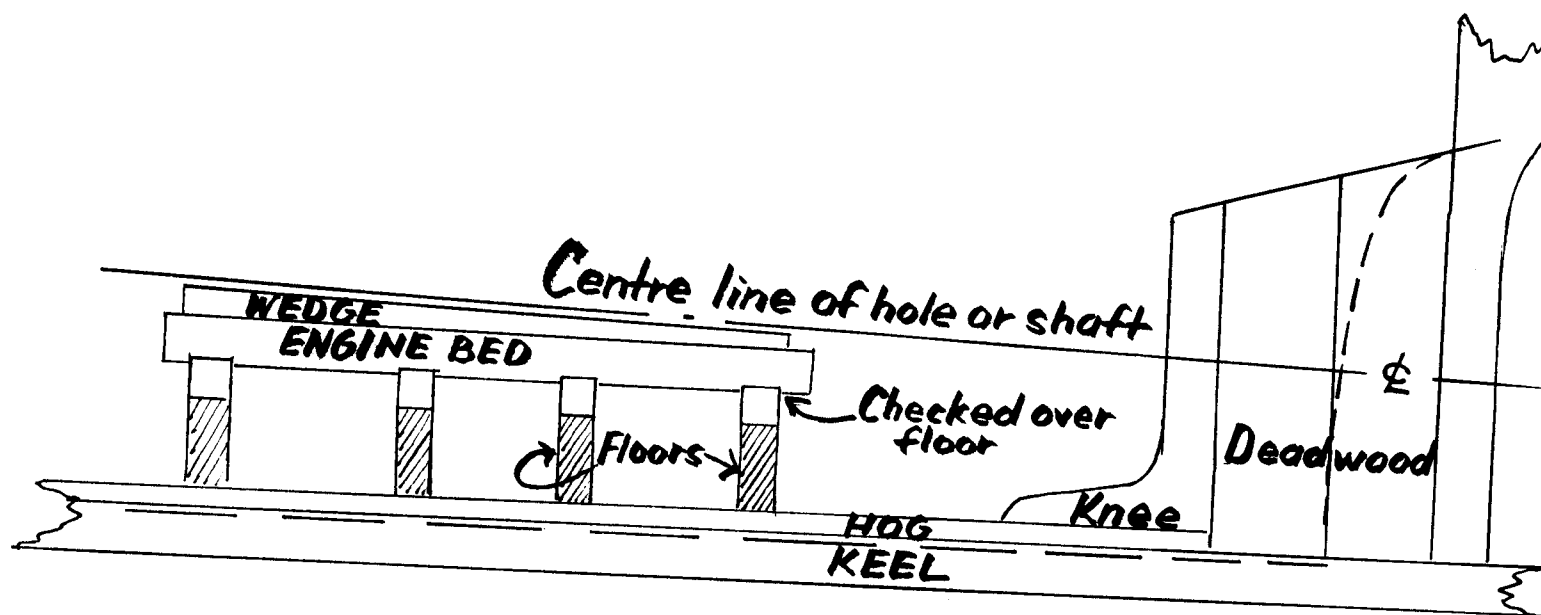
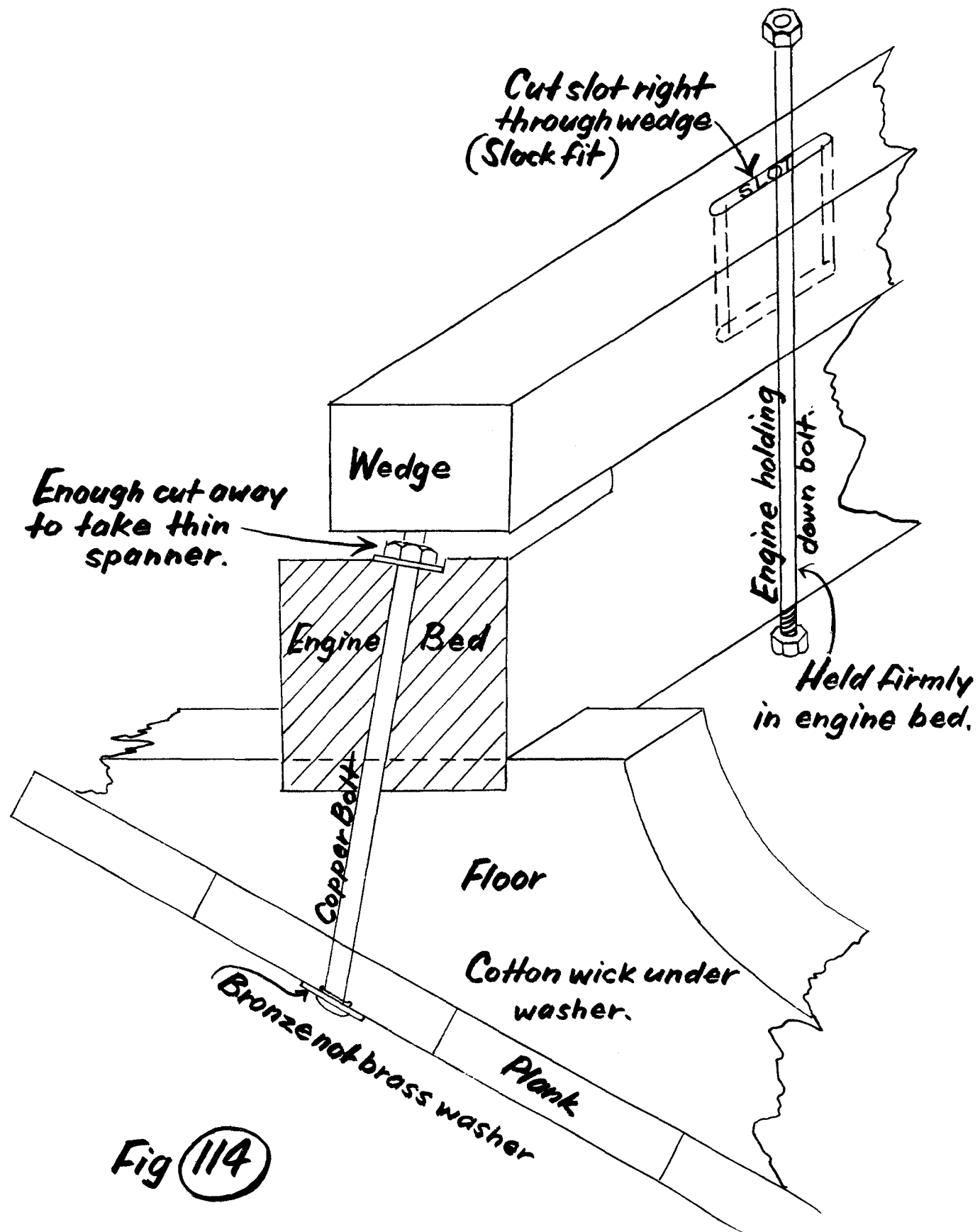
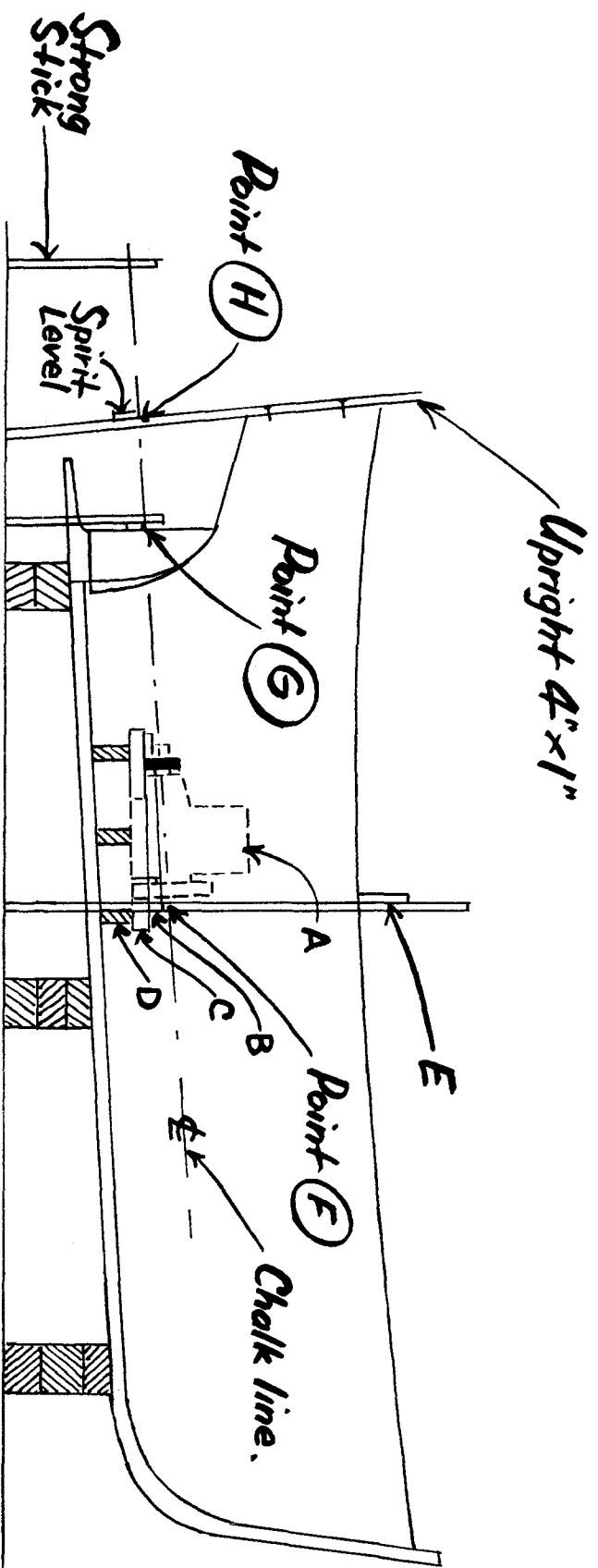


Fig (113)





The engine is shown dotted to indicate that the engine is inside the boat.

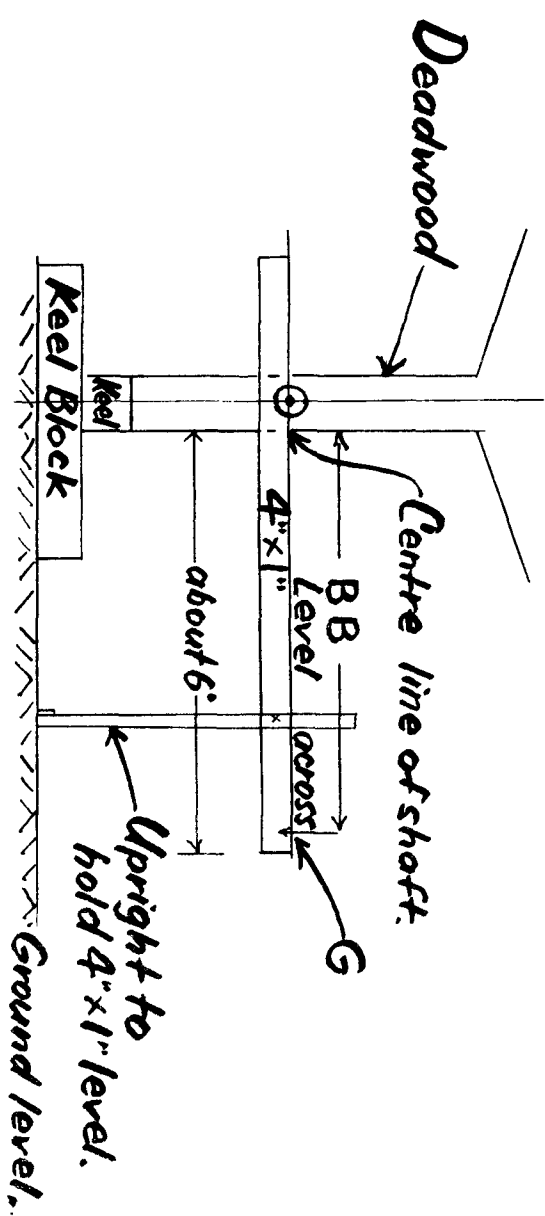


Fig (115)

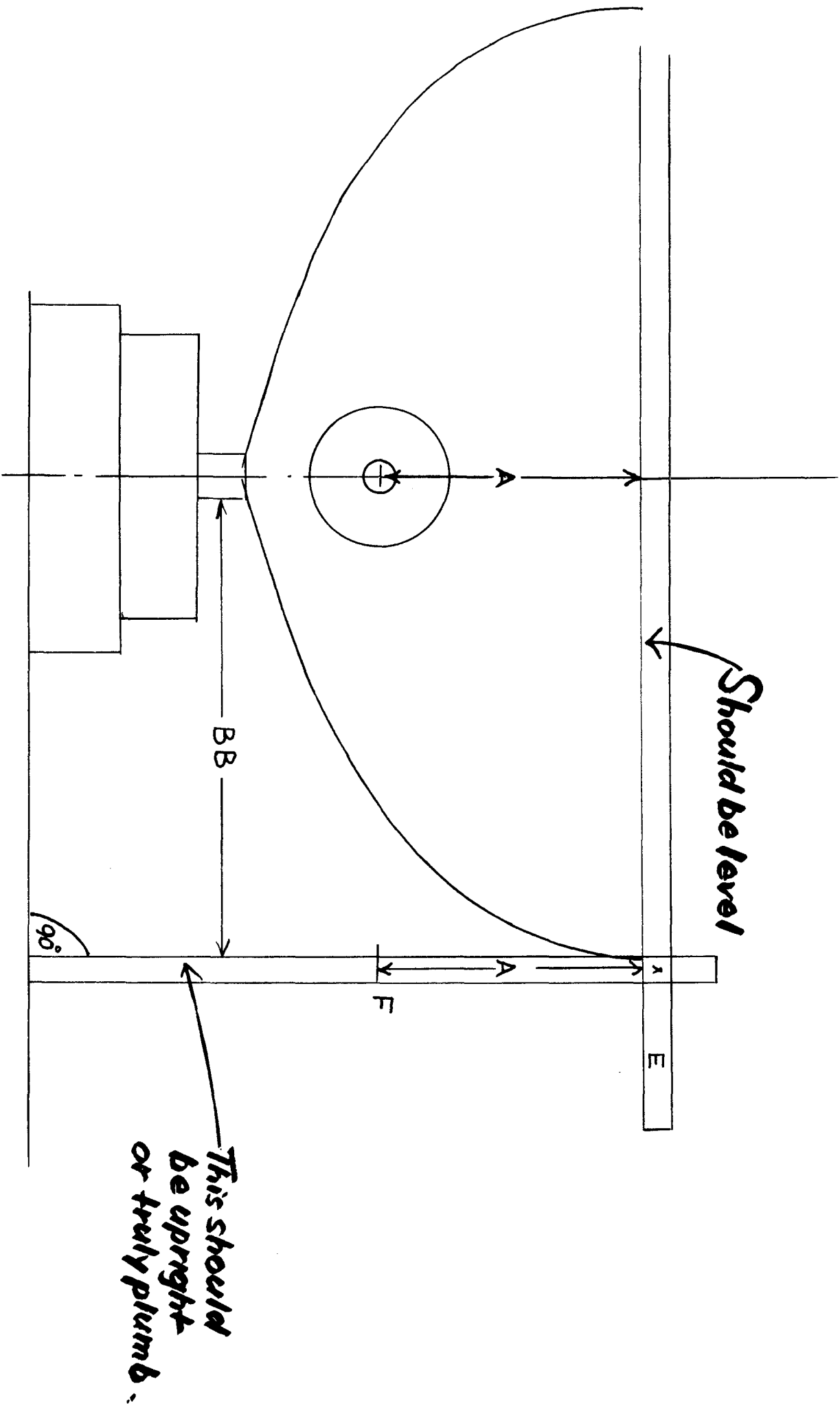
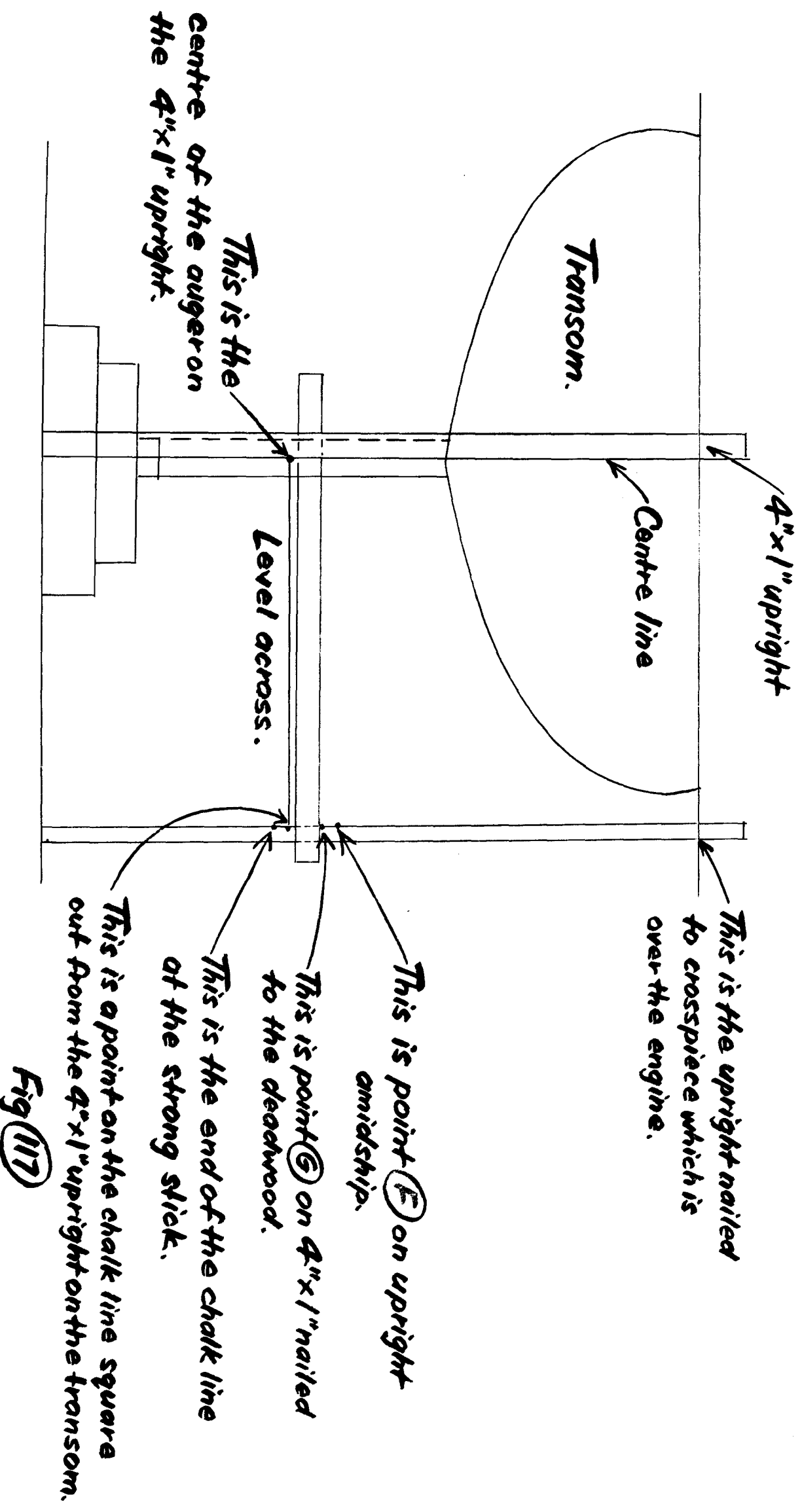
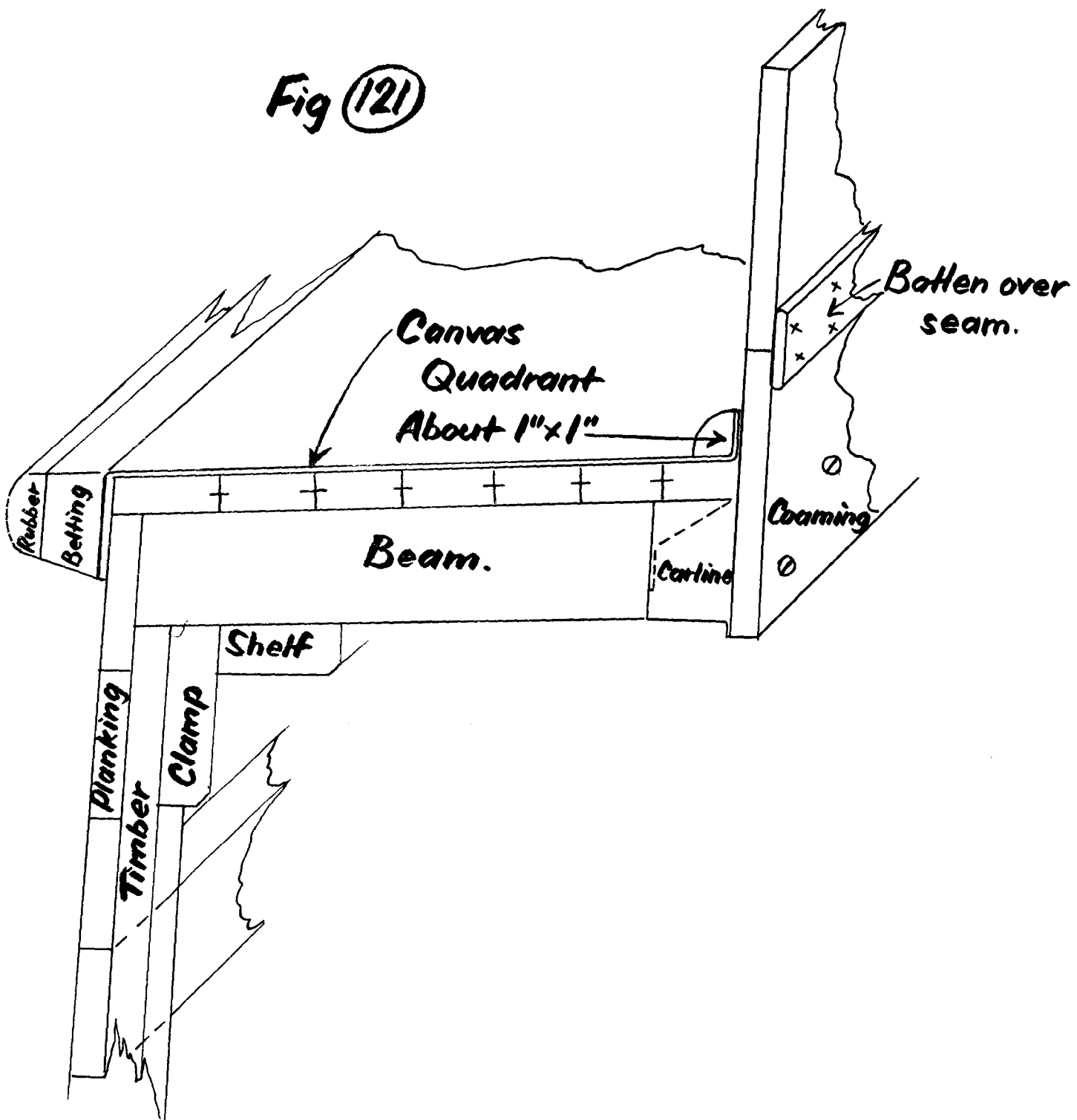
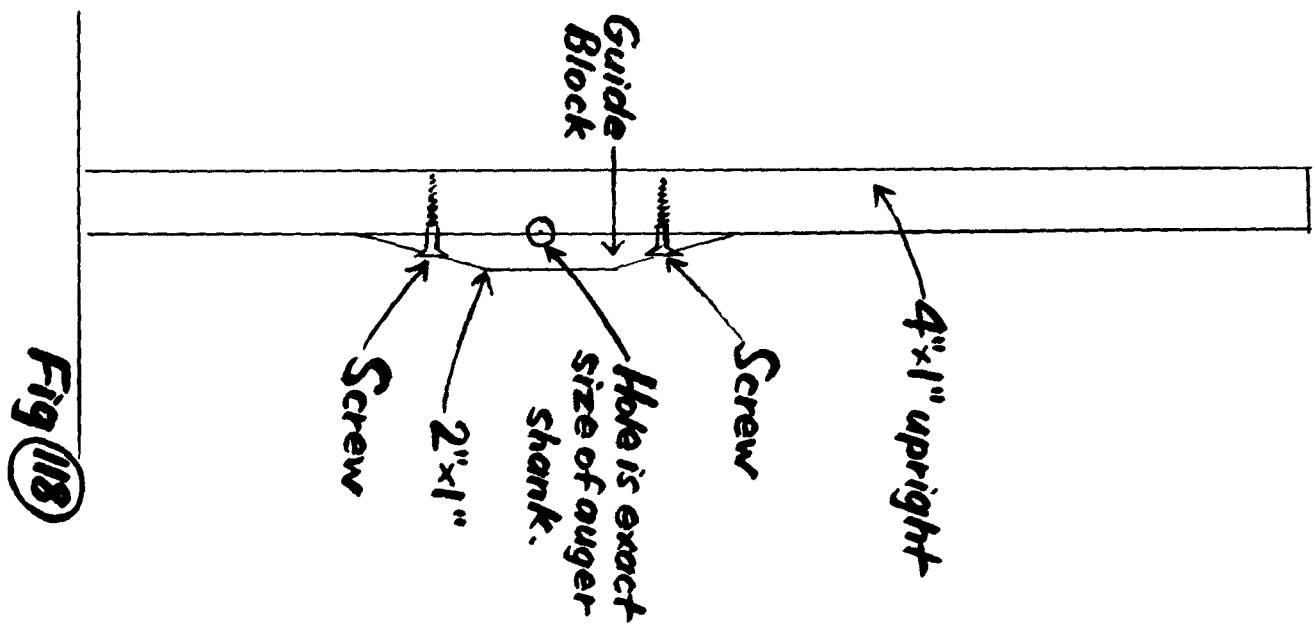
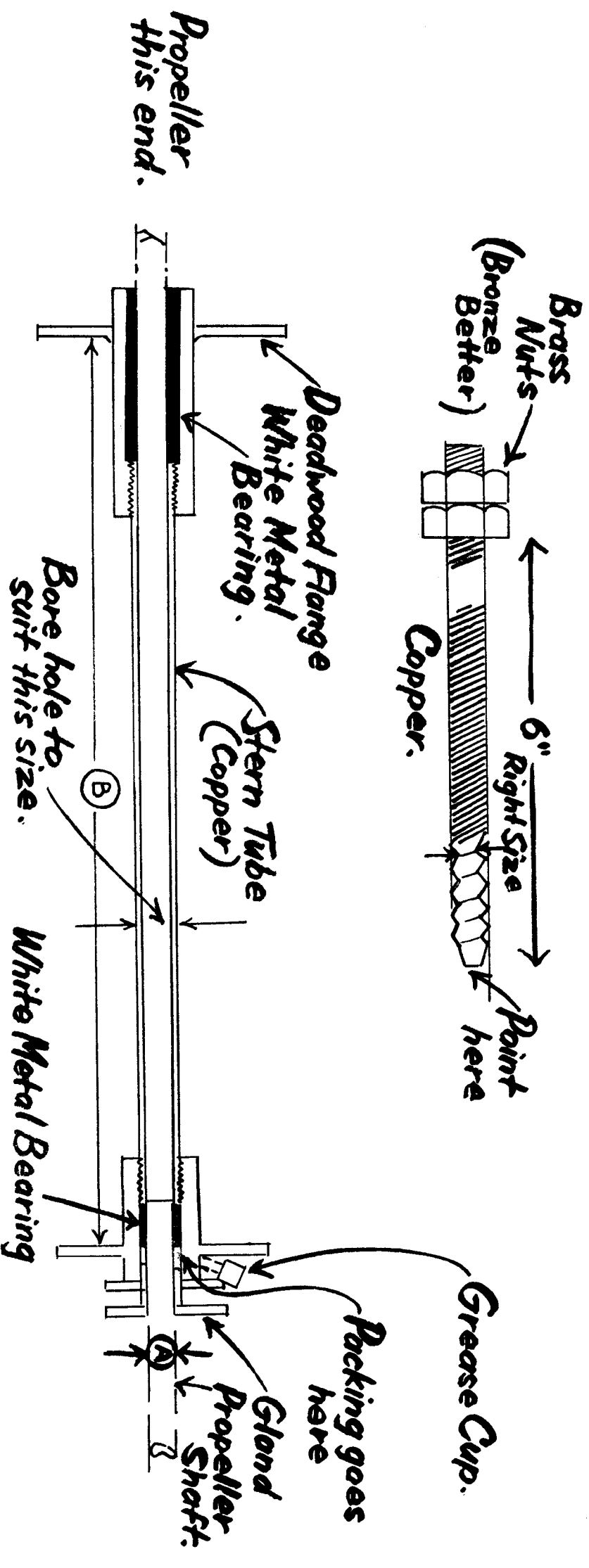


Fig (116)



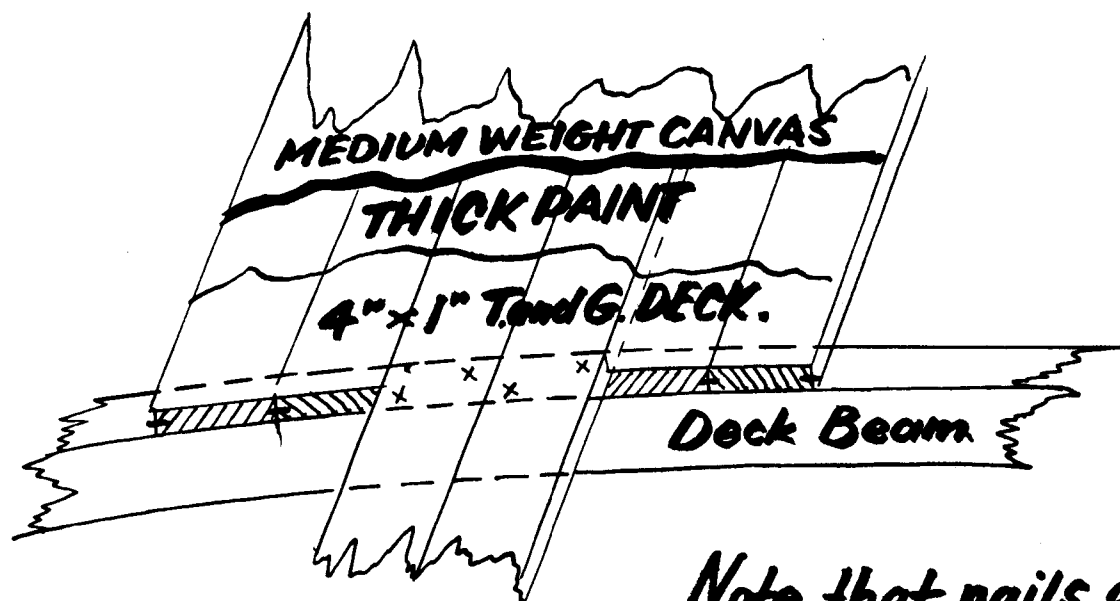






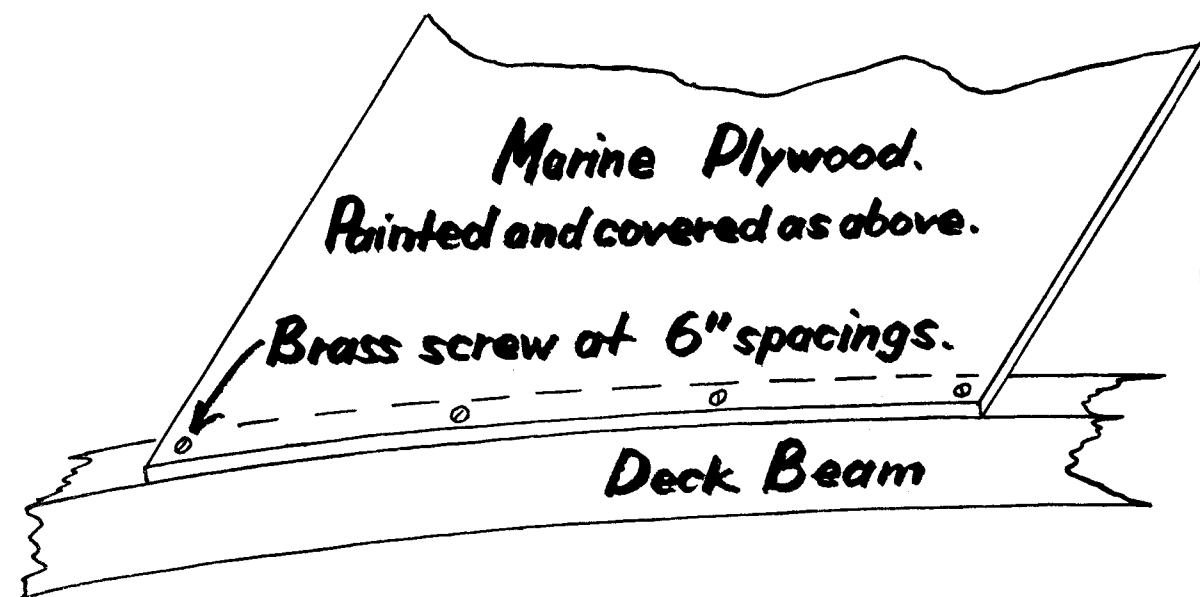
- ① Size of propeller shaft diameter ①
- ② Length of hole in deadwood from outside to inside of boat ②

Fig ①①⑨



(A)

Note that nails are "Staggered"



(B)

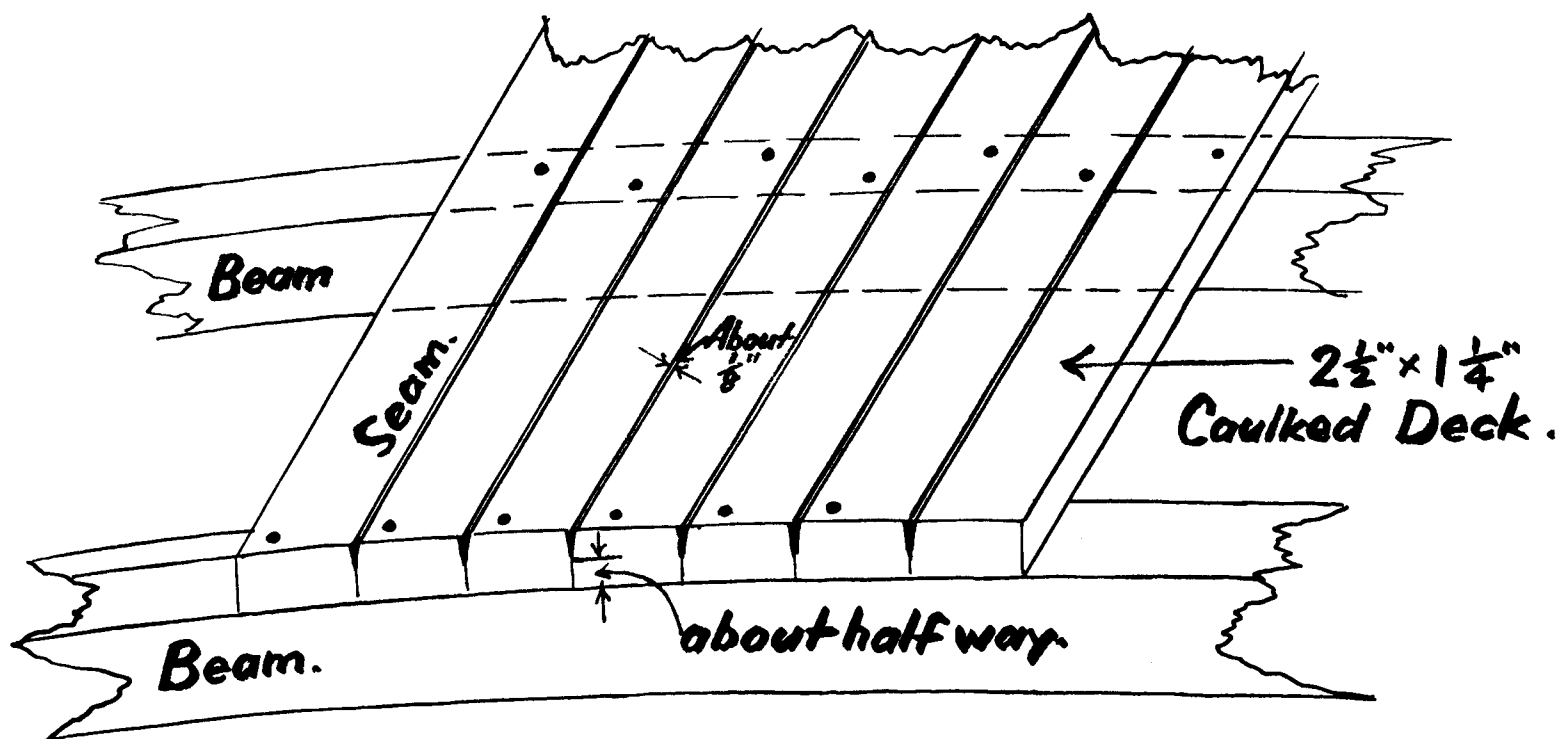
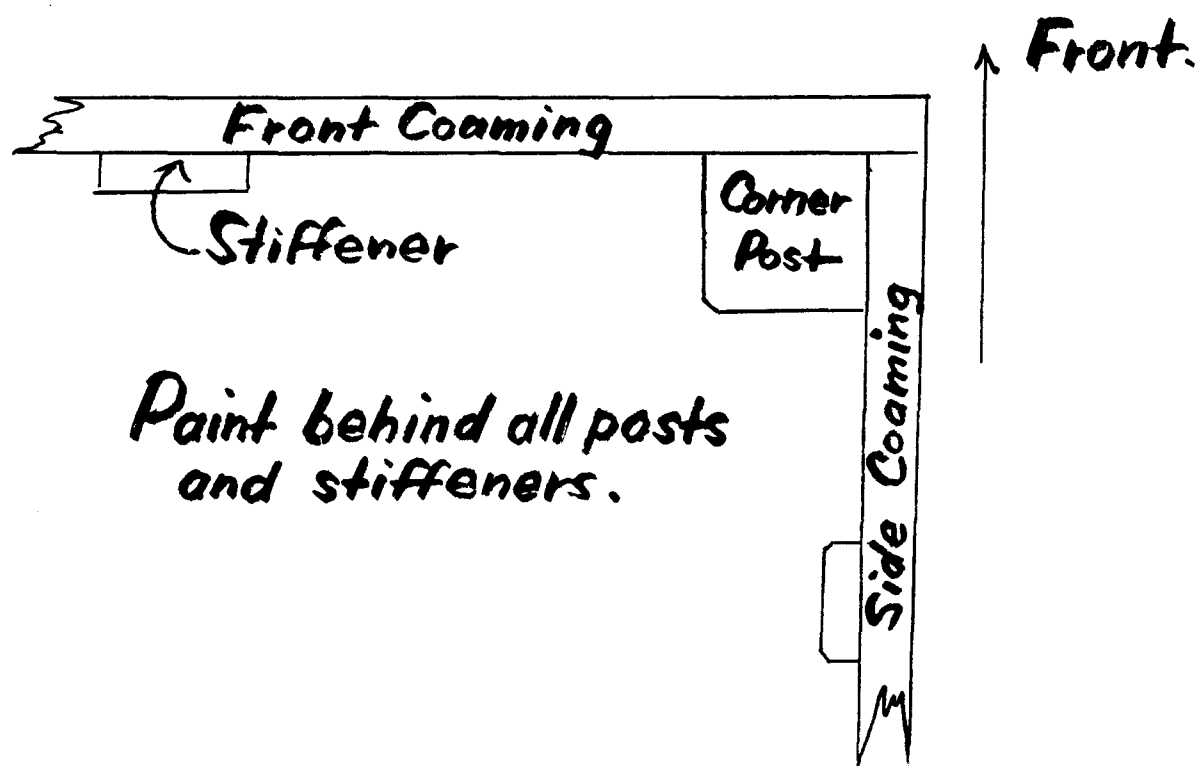
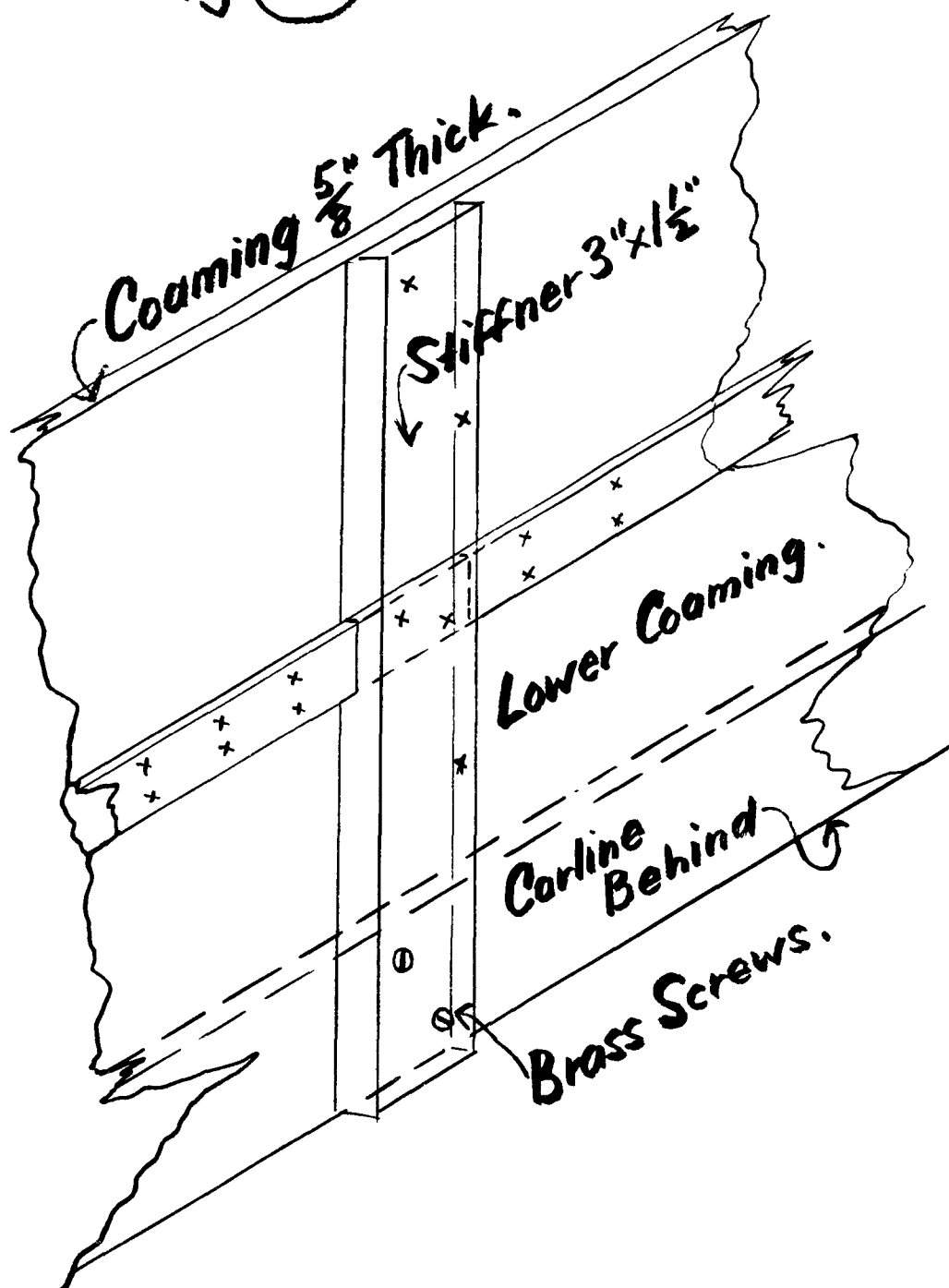
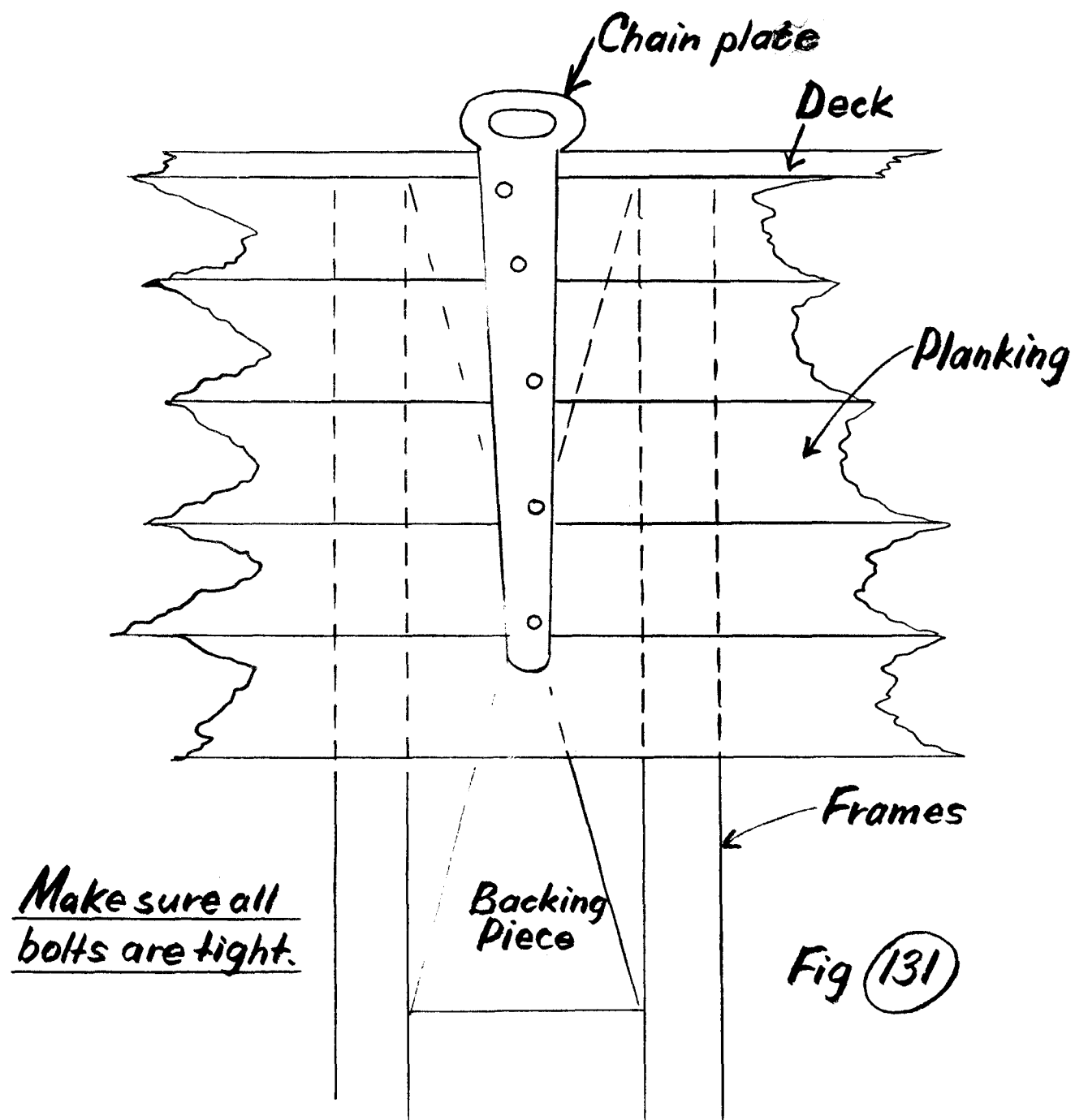
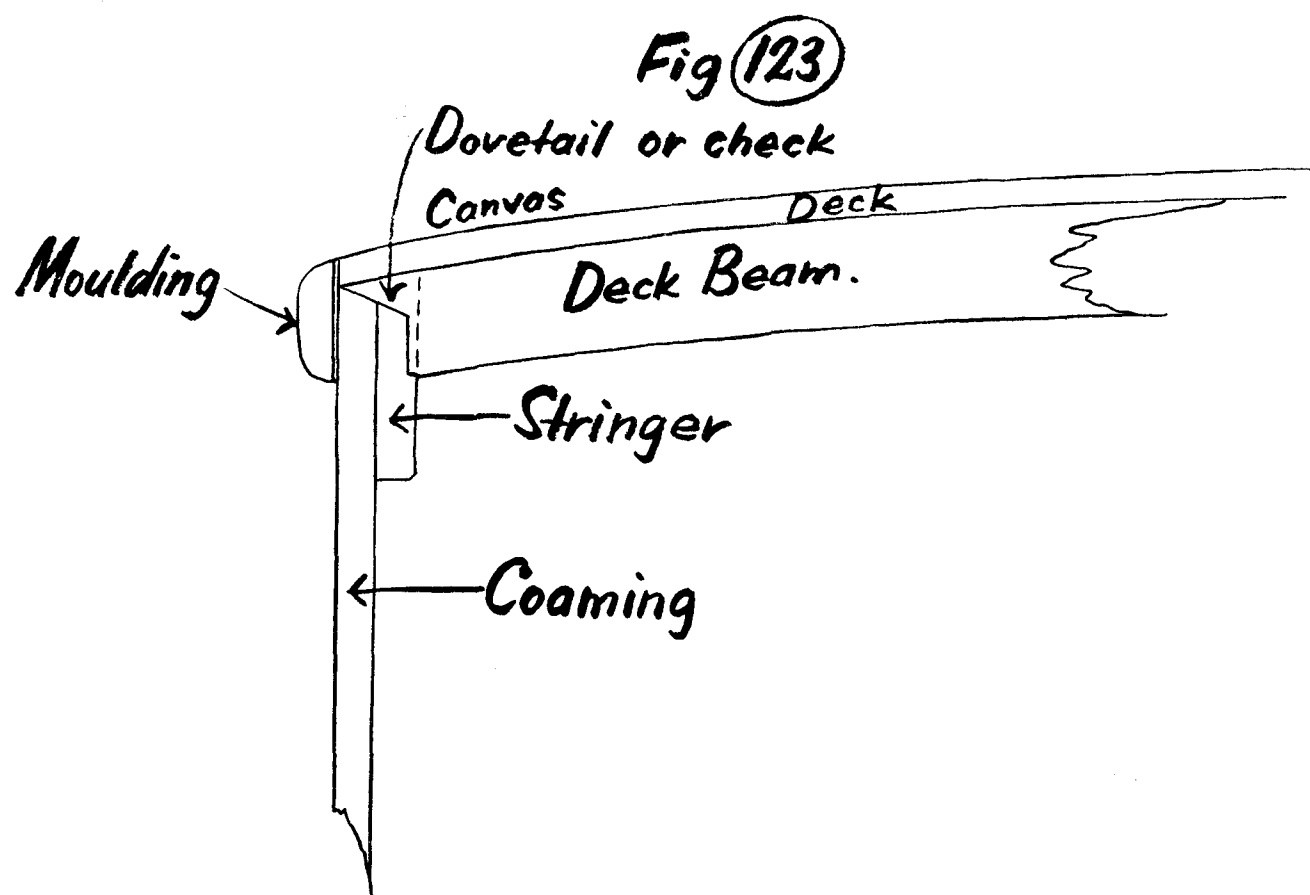


Fig (120)

Fig (122)





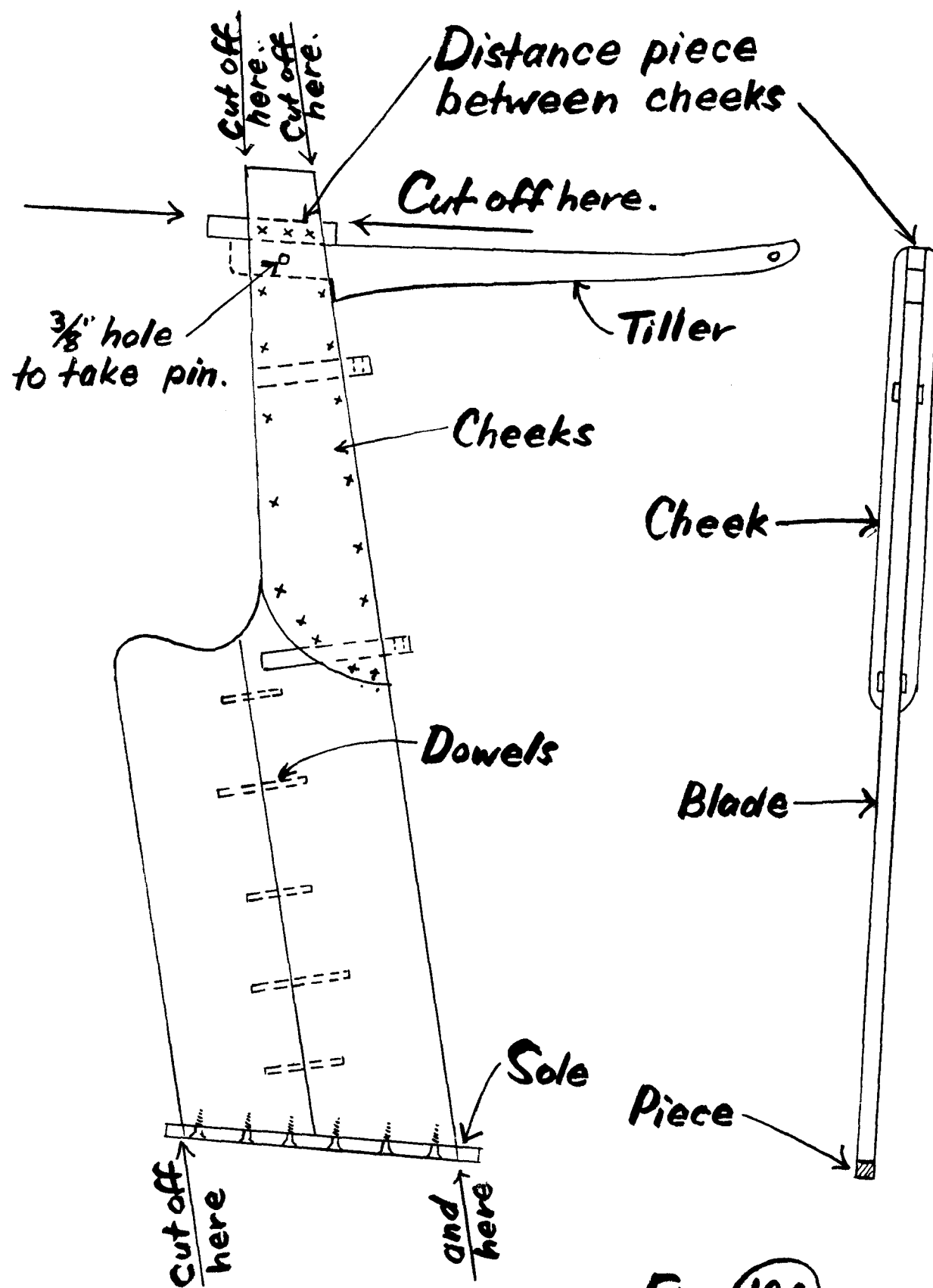


Fig (124)

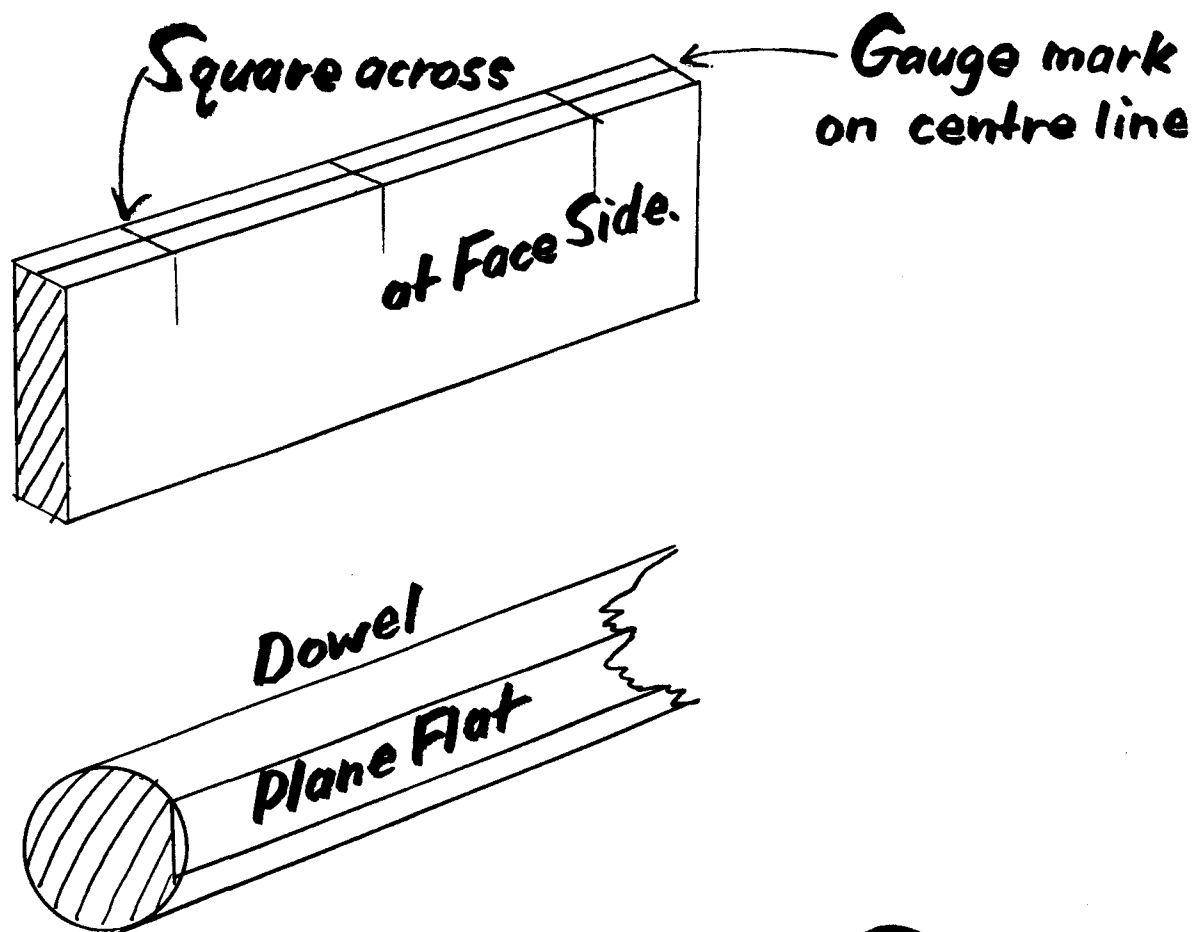
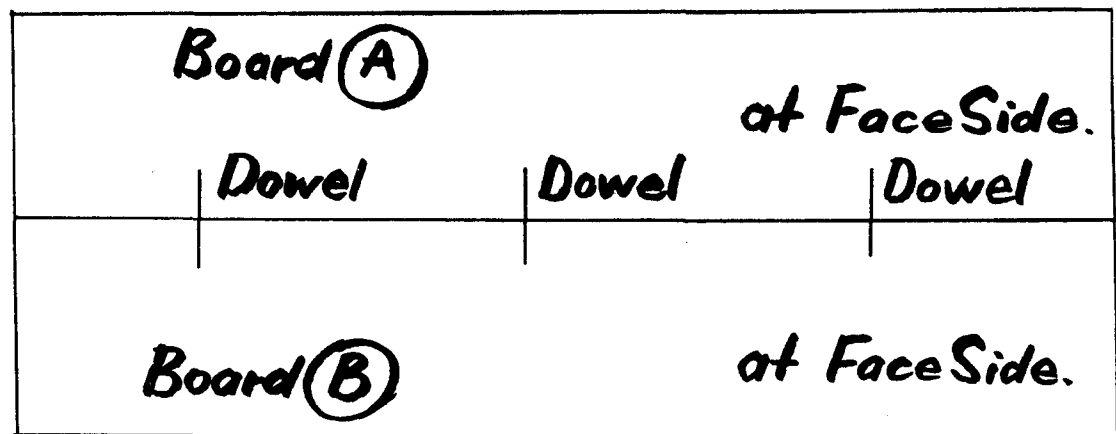


Fig. (124A)



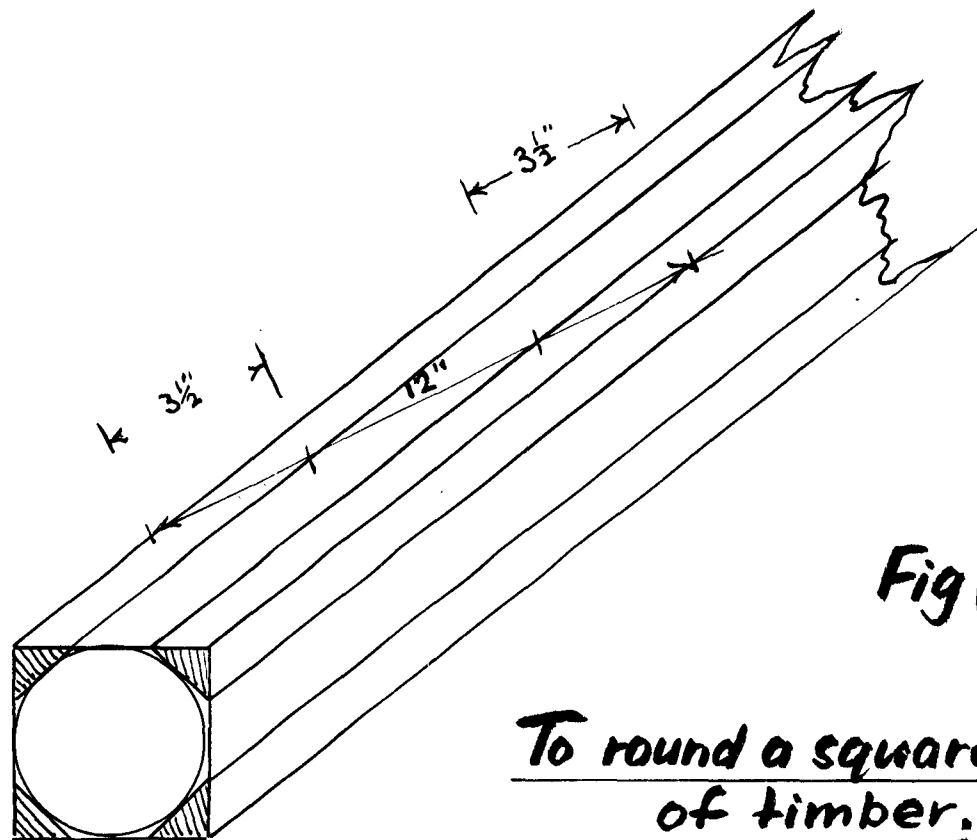
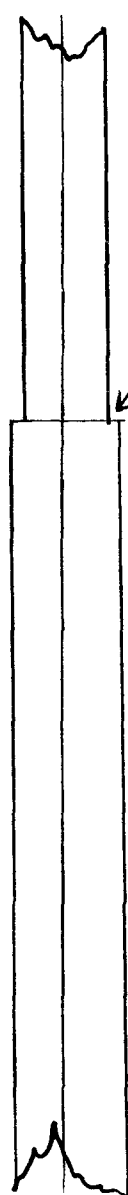


Fig (125)

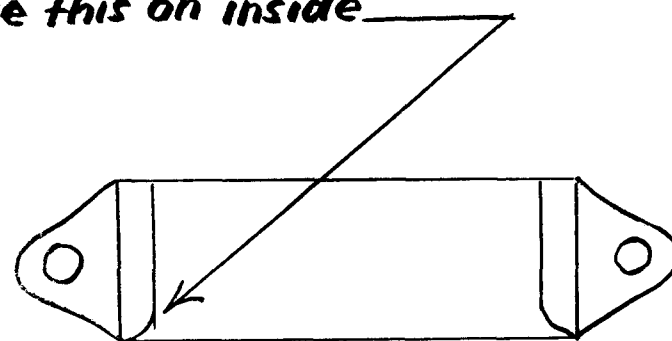
To round a square piece of timber.



Wrong

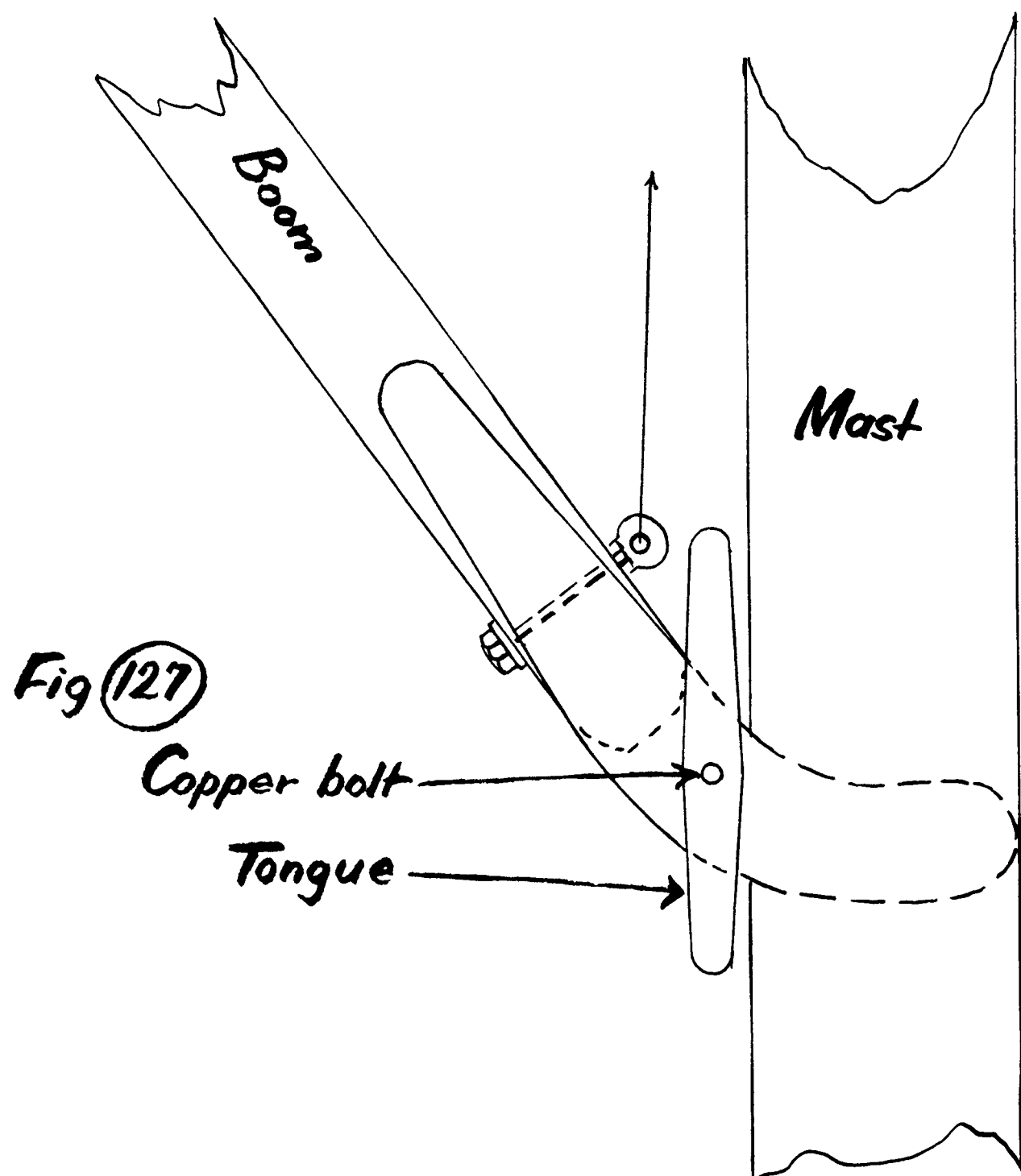
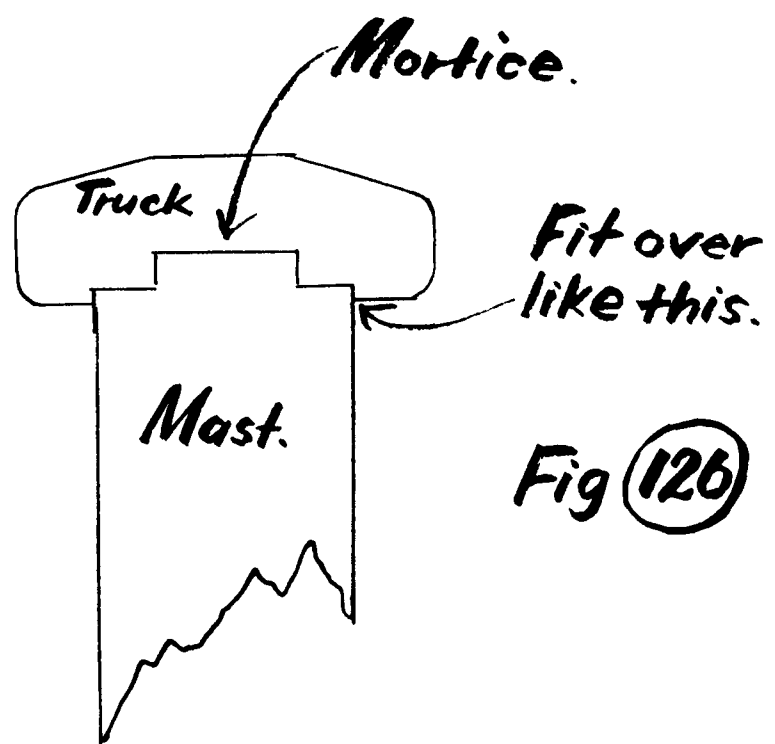


Better, particularly if mast band filed like this on inside



Mast Band.

Fig (125<sup>a</sup>)



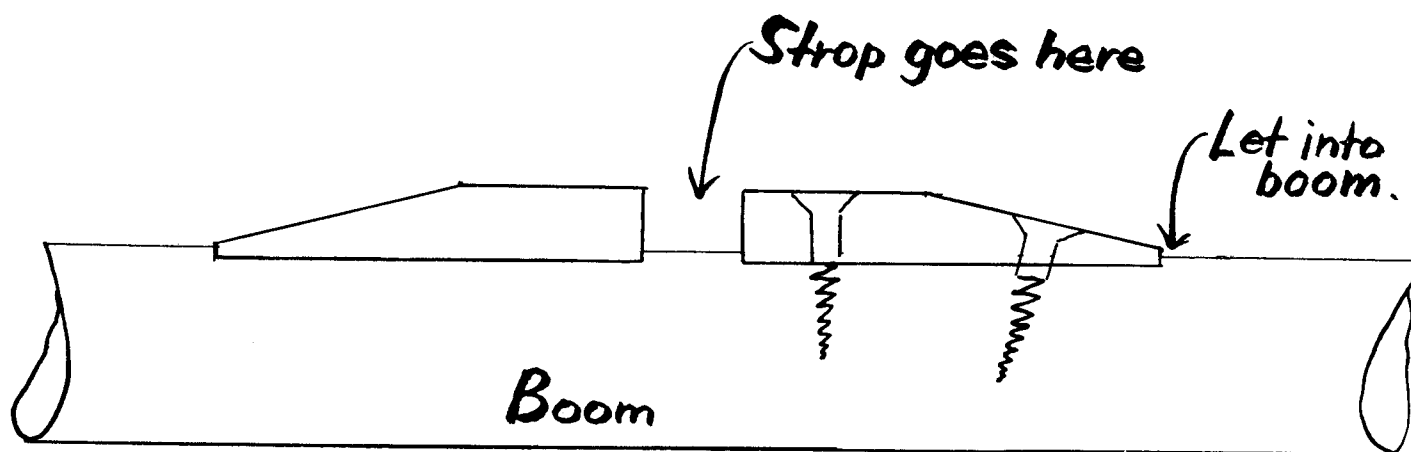


Fig (128)

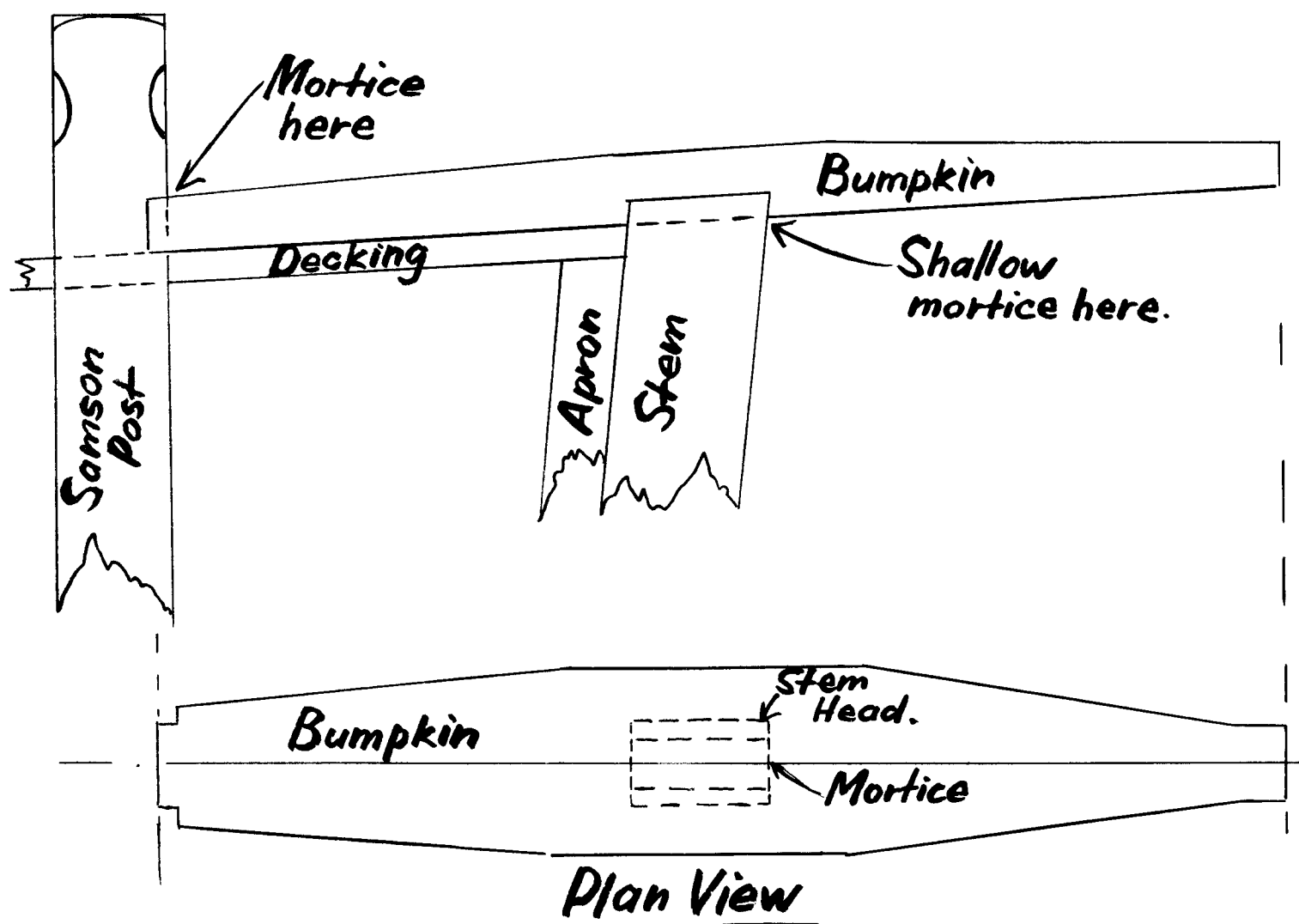


Fig (129)

